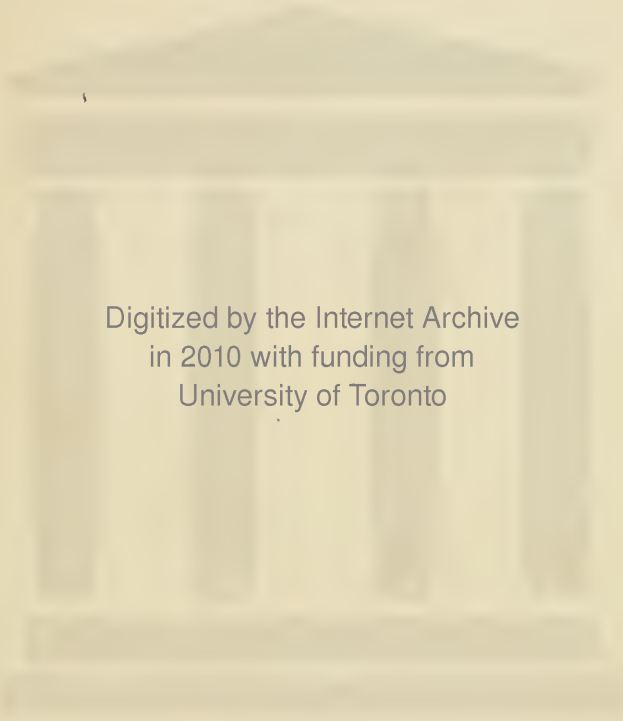
The property of
JOHN HARDING,
Chapel Terrace,
Derby Road, Bootle.

1 vol. (of 4) £5 -

24 issues.

BF
132
.C47
v.1
SMFS



Digitized by the Internet Archive
in 2010 with funding from
University of Toronto

http://www.archive.org/details/christianphysici01lond

THE

CHRISTIAN PHYSICIAN,

AND

Anthropological Magazine.

VOL. I.

" Scire vere est scire per causas."
" To know truly is to know things through their causes."

LONDON: PUBLISHED FOR THE PROPRIETOR, AND

SOLD BY E. PALMER & SON, 18, PATERNOSTER ROW;

And 64, *LAMB'S CONDUIT STREET.*

1836.

J. TRAPP AND CO. PRINTERS, BUDGE ROW, LONDON.

INDEX.

SEPTEMBER.

PAGE.

1 Address.
2 Taxes upon knowledge—Petition of the Finsbury Discussion Society.
4 Obedience and Happiness—Disobedience and Misery.
7 Parliamentary conscientiousness.
8 Mr. Sidebotham's sons drowned,
11 Phrenology, by John Epps, M.D. Essay I.
18 Poetry.
19 On Digestion—hunger, thirst, &c.
23 Prospects.
24 The right of bishops to sit in parliament.

OCTOBER.

25 Obedience and Happiness — Disobedience and Misery.
27 Distressing accident—violation of the physical law.
28 The book of Moloch.—Chapter I.
30 Poetry—day and night.
31 Phrenology, Essay II.
37 The corn laws.
42 Relative expenses of the clergy in different countries.
43 Expenditure on the clergy of the established church of England and Ireland.
43 Digestion, Essay II—the fauces, &c.
46 Christianity and its influence on domestic life.
47 Church and king.
47 How to help the judgment of others.
48 St. Augustine and the lord of the manor.

NOVEMBER.

49 Obedience and Happiness — Disobedience and Misery.—Hidings of God's face.
52 Particular providence, how compatible with the fixedness of the laws of nature.
54 Moral law and *the* moral law.
56 Phrenology, Essay III.
63 The injustice and the impolicy of freeing any class of society from its share in providing for the wants of the state, more particularly the clerical.

PAGE.

69 Digestion, Essay III—the stomach; description of the stomach; its arteries; nerves.
71 The interesting functions of the pyloric valve.
72 Conversion of food into chyme.

DECEMBER.

73 Principles. A petition to parliament. Obedience and Happiness—Disobedience and Misery.
77 Drowning-at-sea Society. Disobedience and Misery — Obedience and Happiness.
84 Absolute and limited monarchy, compared by lord chancellor Fortescue.
85 Phrenology, Essay IV.
93 On Digestion, Essay IV—practical remarks on the stomach; old adage, after dinner sit awhile.
93 Dyspepsia in America; cab horses.
94 The absurdity of a man being his own physician.
95 Reflections suggested by reading the "Extract of a letter from an artist," in the number for October.
96 Applications of Phrenology.
96 Education the cause of discontent.

JANUARY, 1836.

97 Drowning-at-sea Society, Essay II. Disobedience and Misery—Obedience and Happiness.
102 Character and consistency of *The Christian Physician.*
106 National church, when a correct phrase.
106 Protestant ascendancy in Ireland, defined by the celebrated Curran.
107 Phrenology, Essay V.
111 The necessity of Discussion on *all* subjects, with the view of arriving at truth, by W. H. P.
115 On Digestion, Essay V.
120 Literary and other institutions.

FEBRUARY.

121 Drowning-at-sea Society, Essay III. Obedience and Happiness—Disobedience and Misery.

PAGE.
126 Loss of the Neva.
127 Tithes.
129 The Quaker and Mr. Commissioner Holroyd—violation of conscientiousness by self-esteem.
131 Report of the Finsbury Discussion Society.
135 Phrenological enquiry.
136 Phrenology, Essay VI.
141 The Human Body, Essay VI—motion; muscular system; nerves; motive power; muscle the receiving vessel; muscular contraction; muscular exercise essential to health.
141 The Cornish mother's lament.

MARCH.

145 Obedience and Happiness—Disobedience and Misery. Doubts by A. B.
146 Destruction of health in high life in connection with the muscular system. Obedience and Happiness—Disobedience and Misery.
150 Church and state, by Libra.
154 Church rates; the voluntary principle.
156 The dean of York—refusal to pay church rates.
156 Confirmation of the magna charta.
157 Phrenology, Essay VII.
161 Disobedience and Misery. Man violates God's law in making dear what God has made cheap. The history of a stone of taxed flour, by Ebenezer Elliott.
165 The Human Body, Essay VIII.

APRIL.

169 Repeal of the taxes upon knowledge, a letter of the poet John Milton.
180 Muscular exercise. Criticisms on English beauty. Consumption.
182 Muscular action. Miseries from the violations of the laws, in the cases of factory children.
186 Phrenology, Essay VIII.
192 Lines addressed to the bishop of Norwich.

MAY.

193 Repeal of the taxes upon knowledge, a letter of the poet John Milton.
200 Corn laws, Essay II. Disobedience and Misery—Obedience and Happiness
207 Corn laws, by Ebenezer Elliott.
208 Phrenology, Essay IX.

PAGE.
211 Question to the editor.
212 On the utility and the advantages of gymnastic exercises.
214 The Human Body, Essay VIII.—the human skin.

JUNE.

217 Drowning-at-sea Society. Obedience and happiness—Disobedience and misery.
221 Phrenology, Essay X.
230 Miseries connected with curvature of the spine. Penny subscriptions to Dr. Harrison's spinal infirmary.
232 The Human Body. Essay IX.
234 The skin; its cleanliness essential to health.
234 On the establishment of public baths.
236 Corn laws. Disobedience and Misery—Obedience and Happiness.
237 Lecture on drinks. Temperance Societies.

JULY.

241 Corn laws. Disobedience and Misery—Obedience and Happiness.
243 Phrenology, Essay XI.
248 Large heads; commanding power; Rowland Hill.
249 Phrenology, Essay XII.
255 Drowning-at-sea Society. Disobedience and Misery—Obedience and Happiness. Horrible Catastrophe.
256 Hospital libraries.
257 The duty of a state in reference to matters of religion, by lord John Russell.
258 Dr. Chalmers; his past and present opinions; truth not aided by force.
261 Address to the Anthropological Society, by its president.

AUGUST.

265 Address to the reader.
266 American inhumanity; violation of justice.
268 Violation of conscientiousness:
268 Clerical conscientiousness.
269 The human hair.
271 Phrenology, Essay XIII.
275 Address to the skeleton in the royal academy.
276 Phrenology, Essay XIV.
278 Phrenology, Essay by J. I. Hawkins.
289 The mind of the Creator more fully unveiled; Mr. Bellamy's petition.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

SEPTEMBER 1, 1835.

ADDRESS.

MAN, the most noble of the terrestrial works produced by the Divine Mind, is so made as to be capable of enjoying the greatest happiness and of enduring the greatest misery.

To enjoy happiness he must possess HEALTH; to avoid misery he must be free from DISEASE.

HEALTH is threefold: there is *bodily* health, *intellectual* health, and *moral* health.

DISEASE is threefold: namely, *bodily* disease, needing the Physician; *intellectual* disease, needing the Philosophic Physician; and *moral* disease, needing the Christian Physician.

The Christian Physician embraces the Philosophic Physician, for true Philosophy is a part of the Wisdom of God, which, whether manifested in Nature or in Revelation, comes under the attention of the Christian Physician.

Bodily disease manifests itself by SYMPTOMS; Intellectual disease by ERROR; and Moral disease by VICE.

The objects of *cure* before the Christian Physician are, therefore, two,—ERROR and VICE; and, in respect to bodily disease, the object will be PREVENTION.

It is evident, moreover, that man's avoidance of *bodily* disease is to be effected only by attention to the laws of the *natural* creation, every violation of these laws being, from the unbending and invariable nature of the laws themselves, attended with punishment, either immediate or remote. Man must, therefore, before he can be free from bodily disease, become acquainted with THE LAWS OF THE CREATION, viewed in reference to his *body;* and, becoming acquainted, must act upon his knowledge. To communicate this knowledge is one of the objects of the promoters of the Anthropological Magazine, and will cause them to introduce into its pages Physiological, Chemical, and Natural History facts.

It is equally evident, that man can never escape ERROR unless he knows those truths which refer to his *intellectual condition;* in other words, unless he is acquainted with the various laws which regulate the perception and the appropriation of truth by him as an intellectual being. To develop these laws, the Anthropological Magazine will contain, each month, a LECTURE on PHRENOLOGY, and Essays on other matters connected with the Science of MIND.

It is not less true, that man can never be *freed from* vice unless he knows, and acts upon his knowledge of, those laws which constitute the relationship in which he is placed to his Creator, as the Moral Governor of the Universe, and to his Fellow-man, placed like himself under the same government. The Anthropological Magazine is intended for the development of these laws.

Any one beholding the world at the present moment will perceive two things; first, that there is much error and much vice, and that men are anxiously looking forward to a better state. The waters of the human mind have been stirred previously to the healing.

In regard to the vice which prevails in the world, and in regard to its removal, Christianity will be the guide; the reason of so esteeming Christianity being, that it affords the only satisfactory acquaintance with the laws regulating the Moral Government of the Universe; and therefore, while the *volume of* Revelation will be made use of to benefit man's *internal* and *eternal* condition; the *volume of* Nature will be used to benefit man's *external* and *terrestrial* condition. Thus we shall read the two Books God has given for our good.

To effect these objects, the pages of this Magazine will be open to Essays, Extracts, Lectures, and Original Communications from Correspondents, no matter what may be the differences of opinion, if these differences be stated in a proper spirit; the Conductors of the Magazine holding with Milton: "And though all the winds of doctrine were let loose to play upon the earth, so truth be in the field, we do injuriously, by licensing and prohibiting, to misdoubt her strength: Let her and falsehood grapple, who ever knew truth put to the worse in a free and open encounter?"

It is trusted, that these remarks will explain the titles by which the Work will be known: titles, which however unusual, are, it cannot be denied, expressive. Know thyself, is a beautiful, a noble maxim. The realization of it is still more noble. Then man has a chance of attaining to that dignity, which the name belonging to him, *ανθρωπος*, anthrōpos, indicates, namely, *a turner upwards of his eyes.* The aim of the writers of the Magazine being this, what title better than the Anthropological Magazine, could be selected?

TAXES UPON KNOWLEDGE.—PETITION OF THE FINSBURY DISCUSSION SOCIETY.

Such being the objects connected with the Magazine, we feel it to be our duty, unpleasant though it be, to state, that in the attempt to realize these objects, we are met by a power, the influence of which, it is to be hoped, will, ere long, be removed: a power, that has been exerting itself for years in preventing the free expression of opinion: a power, that has done its utmost to perpetuate the darkness which invariably follows upon Ignorance: a

power, that has placed many thousands of our race beyond the pale of improvement, and has endeavoured to monopolize to the few, the advantages that belong of natural, moral, and divine right, to the many.

THE TAXES UPON KNOWLEDGE constitute such a power: the operation of which, and man's duty regarding which, are thus appropriately expressed in a Petition of the Finsbury Discussion Society, (a Society established for the discussion of *all* kinds of truth):—

To the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled.

The Humble Petition of the undersigned, Members of the Finsbury Discussion Society, meeting at 22, Providence Row, Finsbury Square,

SHEWETH,

That your Petitioners are Members of a Society formed to obtain knowledge, and thereby to elevate themselves in the scale of Creation. That, in endeavouring to obtain this noble end, your Petitioners suffer most severely from the pressure of the oppressive burdens commonly known under the name of TAXES UPON KNOWLEDGE.

That your Petitioners consider this burden to consist both of the DUTY ON PAPER and of the TAXES UPON NEWSPAPERS.

That your Petitioners are convinced more substantial benefit would accrue to the public in promoting education by the removal of these taxes, than that which may arise from any *ELEEMOSYNARY GRANT, which is only partially operative.

That your Petitioners being convinced that ignorance and vice of every kind, whether in relation to our political, social, moral, or religious condition, are intimately allied, feel astonished that, in so enlightened and free a country as this, these ignorance-perpetuating taxes should have so long been continued.

And your Petitioners therefore pray your Honourable House to effect for the undersigned a deliverance from this thraldom under which they are now placed, and to give them aid in attaining the noble destiny of their being, by removing the Duty on Paper and the Taxes upon Newspapers.

And your Petitioners, as in duty bound, will ever pray.

John Epps, M.D..... President of the Society
John Scoble ..... Vice-President
John Dale and C. Loosely .... Secretaries
George Rait ..... Treasurer

John Frederick Elliot	BenjaminWest
Joseph Phillips	Andrew Clark
John Henning	George H. Spencer
James Webb	John Soul

* About £30,000 has been voted to support education and to diffuse information. What an insult, when upwards of a million is taken from us by the taxes upon knowledge.—EDIT.

F. R. Murden
William Smith
John Lane
J. J. Abraham, *Missionary to the Jews, &c.*
Joseph King
Jabez Draper
Charles Weeden
J. Trapp
T. Harwood
John Honeywood
James Winning
John Shipton
Right John Priest
John Merrick
Henry Draper
James Harding
John Williamson
Thomas Auger
George Loosely
Ebenezer Brown
Benjamin Cooke
George Simpson
John Slaney
John Henry Adams
William Norris
John Sholl, junr.
Robert Langdon
John Ellis
William Reid
Benjamin Foster
William Jones
Thomas James
John Weyman
George Webb
Walter Heriot
Benjamin Foster
John Honeyman
Edward Gotch
Moses Bats
William Thies
John Forsyth
E. M. Soul
P. Teasdale
W. Wallis
George Whipple
Robert Williams

Should success attend the efforts now making to effect the repeal of these taxes, then the size of the Magazine can be augmented, and thus can be distributed in a given period of time, and at the same expence, a much larger amount of food to satisfy the intellectual, moral, and religious appetites of man's nature: and thus may be expected an advance in intellectual, moral, and religious strength.

OBEDIENCE AND HAPPINESS.—DISOBEDIENCE AND MISERY.

Could a time have been selected in which the human mind is awake to the important facts, that the present condition of the human family is not a happy one, that there is something fundamentally wrong in this condition, that, at the same time, the productiveness of the earth and of human skill, (the sources whence *external* comforts are to be derived,) was never greater than at present, we do not think that one superior to that now existing could have been found. Man, in most civilized nations, is on the move: he is beginning to feel that he is a *man;* and that, as such, has destinies that are of the highest order, and that call loudly upon him for the fulfilment thereof: he is beginning to see that while the Deity has created him for happiness, it is from himself and from his fellow men that his misery, great in its amount and varied in its character, is derived: he is beginning to see that such is the infatuation of the oppressors of the human

race, that, although the happiness of these oppressors is not realized by their excess of wealth, their superfluity of luxuries, their wantonness of dissipation, they still are desirous to possess those exclusive possessions and those peculiar monopolies, which, while not ministering to their own happiness, take away the opportunities of enjoyment which might otherwise be in the possession of the children of want and of affliction. These things are all beginning to be seen, and not only seen but *felt:* feeling precedes the action: the duty of the friend to his race is to direct the action aright. This can be done only by pointing out the ways in which man may be enabled to obey the laws of his Creator, whether these relate to his physical, organic, moral, intellectual, or religious constitution; to become acquainted with these laws, he must study, as has been noticed, the phenomena of the *natural* and the *moral* world.

On observing these phenomena with an unprejudiced vision, he must be convinced that, in these events, a BEAUTIFUL REGULARITY exists. Observing this regularity, he will be led to inquire into the *cause* in which this observed regularity originates; and finds that the same is to be found in the existence of certain LAWS, which have been appointed by the Creator for the regulation of the phenomena, continually developing in the grand moving panorama around us.

On more minute investigation he finds, by his daily experience, that *obedience* to these laws is attended with *benefit; disobedience* with *misery*, or, at least, *injury.*

How continually do *accidents* by land, by sea, by poison, by fire, demonstrate that certain laws exist, which, man neglecting, occasion him to be killed or injured, drowned or poisoned; and when these accidents are examined into, the conviction invariably forces itself on the understanding, that those very laws which, unattended to, become the cause of such disasters, are, when attended to, the sure preventives of the same, and also the producers of an immense amount of universal good. Thus, how many have been the improvements, in regard to safety, effected in shipping by the discovery, and the acknowledgment in practice, of the laws regulating the *pressure of fluids.* How much greater safety and expedition in travelling since the laws, regulating the motion of bodies over certain surfaces, and the best modes of applying mechanical power, have been ascertained. How many protections have we now to prevent persons taking *poison* by mistake; and, when taken, how many *antidotes* has the knowledge of the *laws regulating chemical attraction*, enabled us to supply: thus, *white of eggs* destroys the power of *corrosive sublimate; sulphate of magnesia*, the poisonous agency of *lead; chalk*, the deleterious agency of *oxalic acid*, and of *oil of vitriol.* And, finally, what are fire-proof rooms, fenders, stoves, fire-guards, but instances of the practical application of the knowledge of the laws regulating the action of fire upon bodies?

Indeed, it will be found, the more the subject is examined, that attention to the laws of the natural world will enable man to

obtain a great sum of benefits: that non-attention, in other words disobedience, will inflict much misery.

One or two illustrations will suffice.

A man leans over a precipice to such a degree that the *law of attraction*, operating upon him thus leaning over, subverts his equilibrium in reference to the place on which he stands, forces him to fall to the earth below, to which he is attracted, and he is killed. *Why does this happen?* Because he violated the law: or rather, because he exposed himself to the law of gravitation as acting from the earth below, instead of placing himself in obedience to the same law as operating in retaining him in the place where he was. And thus it becomes apparent that the very same law which is the cause of death, is that which, had he placed himself in a different position, namely, a position less overhanging the precipice, would have been the preservation of his life. "*The law is good*," as Paul relates in regard to another law, and is "productive of life;" our disobedience it is that is productive of death.

Again—It has been appointed by the Creator that a certain amount of *food*, both solid and liquid, is essential to the bodily and mental health of a human being. An individual takes food in this proper proportion—enjoyment and health are his reward. But, let him take food of either kind beyond this proper proportion, and nausea and disease are his punishment. The punishment, arising from the deviation from the proper proportion, is most strikingly manifested in the case of excess *in drink*. The man takes *ardent spirits*: becomes a drunkard. He takes of a stimulus which over excites the organs of his body, and this stimulus in excess. The consequences are soon seen: his liver becomes diseased, fluid collects in the cavity of the chest or of the bowels, and *dropsical* he dies, a striking instance of the evils of violating the law of his Creator: a law, in itself, the source of much gratification, but, being violated, the source of his misery.

It is true that some drunkards live to a lengthened term of years; and this, together with the circumstance that the punishment, arising from the violation of the law, is not immediately apparent, have induced a doubt as to the certainty of punishment following any specific violation. This doubt is a great barrier in the way of gaining obedience, and therefore it may be useful still further to demonstrate the position, that every violation of every law is attended with consequences injurious, and every obedience with benefit.

The following circumstances frequently occur: A young friend is extremely fond of frequenting heated rooms, crowded parties, theatres, or churches. You tell her that it is a law of the natural world, that to have health it is essential that *pure air should be breathed*. She answers, that "though the closeness and the heat are very disagreeable, they rarely injure *her*." She infers this, because she is not made ill *immediately* after the exposure: she does not perceive what is apparent—to the attentive observer it will be apparent—that the violation has been attended with injury

in debilitating the constitution, and in rendering her susceptible to maladies to which she was not before susceptible. How common is it to see young persons, full of health, who visit the metropolis at the "*fashionable*" season, (as it is called,) or rather the *slavery* season, (as it should be called,) return, after the season is over, to the country, with wanness of features and a miserable delicacy of frame.

A striking instance has occurred lately of the punishment arising from the violation of the laws of the Creator, in relation to the organic constitution, in the case of the celebrated preacher, Edward Irving. This individual, in attending, as he thought, to the laws of the moral government of the universe, neglected those relating to his *physical* and *organic* constitution. He laboured by night and by day: disobeyed the law of the Creator, which requires that a certain amount of repose and a change in pursuit are essential to health, and thus brought on an intense degree of cerebral excitement. No doubt this zealous man felt that he was doing God service in destroying or, perhaps it may be said, disregarding his *bodily* constitution, in fulfilling his (deemed) duties as the leader of a body of professing Christians, having some new views; but, he should have remembered that obedience to the *moral* law, will not free from the consequences of disobedience to the *natural* law. He neglected the latter, and has been taken away in the prime of life from his family, his wife, his children, his friends, and the world. Acting as he did, the result could not be otherwise. Had he felt the certainty of punishment following the violation of the natural law, as strongly as he maintained this certainty in regard to the *moral* law, he would, humanly speaking, be living now.

To shew the fixed nature of the laws, and the certainty of happiness from obedience, of misery from disobedience, the fact that ignorance does not free from punishment is striking. Thus, let the innocent infant take some arsenic by mistake; the ignorance, the helplessness, the innocence of the little dear, do not prevent the operation of the law: torture and death are the consequence.

As this certainty of result, namely, benefit from obedience and misery from disobedience, continually manifests itself in the natural world in reference to man's physical and organic condition; and as this certainty is dependent upon the fixedness of certain laws, appointed by the Creator, for the beneficial regulation of the phenomena of the natural world, is it not reasonable to conclude that the same certainty exists in reference to the phenomena of the moral world?

This subject will be entered upon in the next number.

PARLIAMENTARY CONSCIENTIOUSNESS.

The proceedings in Parliament, on Thursday, August 6th, respecting the case of Captain Acheson, (who was dismissed from the service of the King of England, because he would not fire a salute in honour of some Romish ceremonial at Malta,) were ren-

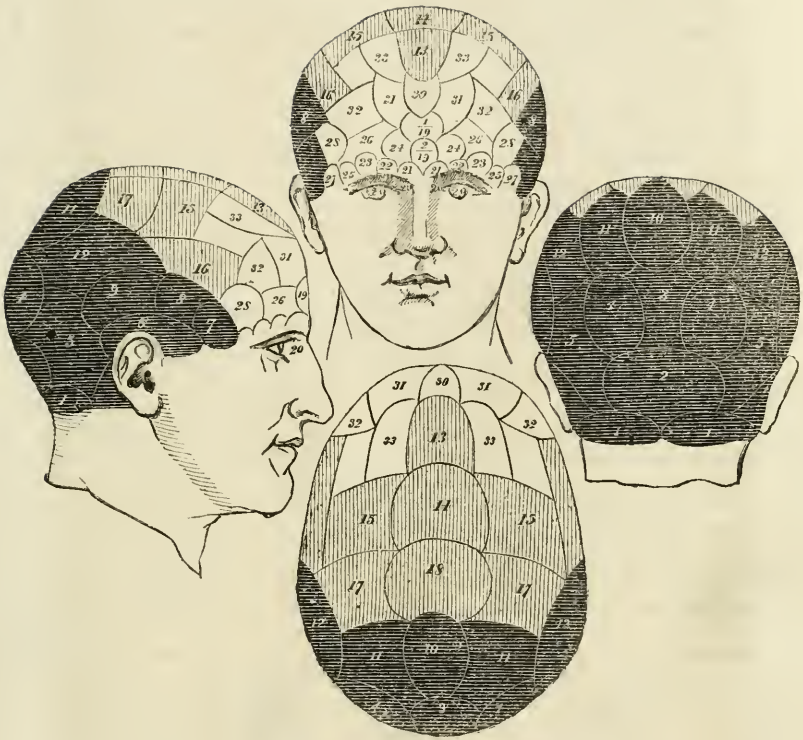
dered particularly remarkable by the following speech of one of the Representatives, Mr. P. Howard:—

"There could be no doubt, he apprehended, that Captain Acheson's duty required that he should have fired the salute. He had a case in point—it was the case of the train-bearer of the King of Assyria. *(Great laughter and cheers.)* He hoped the House would hear the case, because it did seem to him to bear strongly on the question at issue. When the train-bearer of the King of Assyria—*(Laughter)*—when the train-bearer of the King of Assyria went and cried unto the prophet Nathan, "Can I attend my Sovereign to the temple where he goes to worship?" The prophet said to him, "Go in peace." No doubt the prophet Nathan gave the train-bearer this advice, because he knew that the train-bearer was merely acting in an official capacity, and performing a civil service in going to a place of worship to which he did not belong. *(Cheers and laughter.)* Now it seemed to him that Captain Acheson's and the train-bearer's were parallel cases; and that Captain Acheson, acting upon the principle of the train-bearer, might, in the discharge of his official duty, have overcome his religious scruples. This was the broad line of distinction. He had stated it clearly, and he hoped to the perfect satisfaction of the House." *(General cheers.)*

This reasoning would, if it had been operative, have kept the world in the most barbarous despotism, the most horrible superstition. This reasoning might serve to banish liberty and virtue from the earth; because it throws all the responsibility off the mass upon the guider of the mass. It is a species of political godfathering, which ought always to be deprecated, and which ever tends to make man a mere machine.

Mr. O'Connell on the same evening, and in the debate upon the same case, held up this doctrine to reprobation, and advocated the cause of Captain Acheson: thus manifesting that true nobility of mind, which, in advocating a principle, namely, *that every man should be allowed to exercise unbiassedly his religious sentiments*, will even sanction a manisfestation of disapproval, on the part of another, of that which he, the principal maintainer, holds as proper: for be it remembered, that Mr. O'Connell is a Catholic, and Captain Acheson was dismissed because he would not fire in honour of a Roman Catholic ceremonial. O! that Protestants would imitate this conduct of the vilified Daniel O'Connell!

A few days since, three sons, aged severally fifteen, seventeen, and nineteen, of Mr. Sidebotham, went, under the care of their brother, aged thirty-two, to bathe in a reservoir attached to the Paddington Canal. They had not been in the water many minutes when they disappeared. No other assistance being at hand, the elder brother plunged in with his clothes on, and two hours after the four brothers were dragged out, the three younger having clasped in their embrace the elder. The father came: nature overpowered reason: and one house contained four lifeless brothers, and a parent whose mental agony it would be vain to attempt to describe.



PHRENOLOGY, BY JOHN EPPS, M.D.

Essay I.

The study of Phrenology constitutes the most interesting and important duty of the human being. The subject is no less than the Human Mind: that part of our being imparting to us our distinctive character, and exalting man so highly in relation to the other created beings by which he is surrounded. In fact, it is this mind with which all society and its duties are concerned: it is by this mind that society is linked together or torn asunder: it is by this mind that we are enabled to fulfil the various duties connected with the varied relationships of society, whether these be those of servants, of masters, of rulers or of ruled, of parents or of children, of teachers or of taught. The human mind, wherever man passes, is man's perpetual companion. If he wants to hide himself from its operation, the very attempt to hide is a mental operation. In fact, the mind is to man an *omnipresent*. It is the source of his happiness and of his misery: it is the beginning and the end of all the superior actions connected with our existence: it is that which we train and develop from the ignorance and the helplessness of infancy into the knowledge and the wisdom, and the strength of manhood.

Many subjects are interesting, and afford much satisfaction in their investigation, but there can be no such subject so interesting as the mind itself. The mind, that takes notice of all other subjects, must be the most interesting of all subjects: the mind, in fact, being that which constitutes man, must be the highest study, since the saying "know thyself" is recognized by the general consent of antiquity, to be so excellent a maxim, as to have justified the locating of its first promulgator among the wise men of Greece.

It is not wonderful, therefore, that so many have been the attempts to investigate the mind itself: and no astonishment is felt on observing, that, in almost every period of the world's existence, individuals have existed who have delighted in observing its manifestations, and analyzing these when manifested. Two classes of individuals have investigated the mind: the first consisting of those who have described the phenomena of the mind: the second of those who have attempted to analyze and systematise these phenomena. The first will comprise those who are known under the name of moralists, divines, and poets. These, having laboured in giving accurate descriptions of character, have often succeeded in giving the most accurate portraits of mental states. But these are only intellectual and animal and moral portrait painters. They painted in print. They have done good so far: but they have not sought to penetrate into the constituents of the portraits which they have drawn.

The other class attempted to take this step. They proceeded to the analysis of the mental states themselves: they wished to develop the causes and the constituents of these mental states: but they made one fundamental mistake, namely, they began to compare themselves with themselves: they sat down in their studies, and reflected upon their own feelings and intellectual states, and arguing thence as to the intellectual states and feelings of all other men, fell into the most egregious blunders. They, in their abstractions, forgot the realities of life: or, if remembered by them, were cast aside as untrue, if not affording support to their particular creed. The consequence of this abstraction was most grievous; the mind became occupied with the most absurd questions, as the following extract from the writings of Dr. Thomas Brown will show. Referring to the questions which were discussed in the darkness of the middle ages, he describes the following:—Whether angels pass from one point of space to another without passing through the intermediate points? Whether they can visually discern objects in the dark? Whether more than one can exist at the same moment at the same physical point? Whether they can exist in perfect vacuum with any relation to the absolute uncorporeal void? And whether, if an angel were in vacua, the void could still truly be termed perfect?

With regard to the mind itself:—Whether its *essence* were distinct from its *existence?* Whether its *essence* might therefore subsist when it had no actual *existence?* And what are all the qualities inherent in it as a *nonentity?* In morals:—Whether ethics were an art or a science? Whether, if the mind had freedom of choice, this independence will be an entity or a quiddity? And whether we should say with a dozen schoolmen, that virtue is good because it has intrinsic goodness, or, with a dozen more, that it has this intrinsic goodness, because it is good?

The fundamental error of these men was, that they, instead of considering mental manifestation in connection with the corporeal parts with which those mental manifestations in this world are connected, viewed them in this isolated state, and not only thus viewed them, but in this isolated state regarded them as connected with their own minds. These men were intellectual Procrustes, who, if the facts did not meet their views, stretched them; if going beyond, lopped them; like their brother robber, who, when his victims were not long enough for his bed, stretched them to make them so; when too short, stretched them to make them sufficiently long. Here we obtain two points of fallacy.

A third class of mental students, which have come forward conspicuously, within the two last centuries, perceiving the errors into which these spiritualists fell, went into the opposite extreme, and began to look upon mere organization as the cause of all mental states. These individuals, partially right, did not travel far in their investigations, because they offended in their general deductions against opinions so generally prevailing in society, and thereby excited such an opposition, that one of the most talented, one of the proudest of them, felt himself obliged to bow, and,

frightened by the force of persecution, disavowed the sentiments which, shortly after the breaking out of the first French Revolution, he had boldly promulgated:

These, called the *materialists*, were not far wrong in their principle. The principal mistake consisted in inferring mental manifestations as *dependent upon* rather than *connected with* corporeal organization. They were too general in their remarks. They looked to the absolute size of the brain as their guide: but this turned out to be so fallacious, that they adopted many modifications of this particular opinion, and finally left the mind itself undelivered from the darkness with which it was invested.

The science of mind itself, therefore, obtained no *fixed principles*. The moralist, the poet, described *character*, in other words, *mind in its manifestations*, but went no farther: the metaphysician attempted a further step, namely, the *analysis of these manifestations*, but failed because he took his own mind as the standard by which to compare all other minds. The *materialist* also, not knowing that there was such a matter as *relative* size as well as *absolute* size of brain, and also that different parts of the brain have different duties associated with them, made little progress in mental investigations.

A fourth class of students of the mind has now arisen, and these are the *Phrenologists*. They have been pre-eminently successful. Their success is dependent, as every phrenologist has modesty and courage sufficient to declare, not upon any peculiar superiority of mind possessed by them over other men, but simply upon the circumstance, that the method that was adopted by them in the investigation of mental manifestation was the true one. Wherein is its truth, its superiority, over other previous modes of investigation? The answer is simple. The phrenologist studied *mind* and *matter* together: he investigated *manifestation* as connected with *organization*: he went upon the broad principle, that the more complicated the manifestations the more numerous the machines. While he maintained that the mind is connected with the brain, he maintained that *difference in manifestation* must be associated with *difference of organization* of the brain. It is true that the accidental observations of Gall, led to the development of this principle in reference to the mind, and its organ, the brain; but now the principle is recognized and held as a basis by every phrenologist.

The phrenologists, therefore, disregarding the spiritualism of the spiritualists, and the materialism of the materialists, but studying function with organization, have arrived at conclusions which every day's experience tends more fully to establish.

Viewing the labours of all these individuals, we may behold them as contemplating a watch. The moralists, the poets, and the divines described the movements of the minute and hour hands; the metaphysician reflected upon these motions without taking the trouble to look into the machinery; or if he did look into the machinery, he did not connect the machinery with the movement of the hands: whereas the phrenologist views the motion of the hands and the machinery together, and thus arrives at satisfactory conclusions.

Having thus pointed out, as briefly as is consistent with clearness, the different classes of individuals who have laboured to throw light upon the mind, it will be proper now to proceed to the examination of those principles upon which phrenology, as a science, is based.

The first principle that we have to notice is, THAT THE BRAIN IS THE ORGAN OF THE MIND.

It may be proper here to give a short description of the brain itself, its situation, and its appendages. The brain is situated within the cavity formed by that which is called *the skull.* Inside this bony covering there are three membranes or skins, the one the outermost being strong and thick, called the *dura mater:* the second, more internal, beautifully thin and transparent, called the arachnoid tunic; and the third, lying in direct contact with the brain, and enveloping it more closely, is called the *pia mater.*

The brain itself consists of two *hemispheres,* so that the brain is double as it were, forming an unity, however, the two half spheres being connected by a central band. The brain is divided into three lobes or rounded divisions, and occupies all the fore part, all the upper part of the skull, and a considerable portion of the back and lower part of the skull, down as far as the ridge or mark on the skull behind, which corresponds to a ridge internally, where a strong membrane is attached, separating the large brain, now spoken of, from the little brain, called the cerebellum, situated below this division.

The two hemispheres of the brain are separated one from another at the upper part, by a partition leading in a direct line and in a perpendicular position from the part corresponding nearly to the point of the nose, to the ridge already mentioned.

The large brain and the little brain each send off, as it were, two legs or branches, which unite together at the lower surface of the brain, and form the commencement of that which is called the SPINAL CORD, which extends all the way down the spine, being generally known by the name of *pith.*

Having thus described what the brain is, the principle will be examined.

The principle promulgated is, *That the brain is the organ of the mind.* The word organ is here made use of. By this word is meant simply that the brain is the part through which the mind *in this world* acts or works. The word organ comes from a Greek word εργον (ergon) which means *a work:* suppose, for instance, I will to lift this skull, I grasp it with my hand and lift it: now I say that my hand is the *organ of my will,* and no one would understand when I speak thus, that I mean *my hand is my will,* but merely that it is the part which my will makes use of to effect its εργον or work. So, when the phrenologist says that the brain is the organ of the mind, he by no means conveys that the *brain is the mind.* In fact, the phrenologist leaves the question of materialism or non-materialism quite untouched, except, so far as his influence extends, he endeavours to establish that the question is one which is, as yet, quite "beyond our ken," because no two persons are agreed what materialism is and what materialism

is not. He further endeavours to establish that much valuable time is wasted in disputing upon this point, and also that those who rest their belief in the immortality of man upon the supposed immateriality of the mind, build upon a sandy foundation, because the immortality of the mind is founded upon the will of the Creator, and not upon the materiality or the immateriality of its own constitution.

There is another term used frequently by phrenologists, namely, *function*. This is made use of to express the power of manifestation attached to any particular organ: thus we say that the function of the organ called the liver is to secrete bile: the function of the lachrymal glands to secrete tears; of the salivary glands to secrete saliva; and, so, with the other organs of the body.

Most men agree that the brain is connected with the mind. Dr. Doddridge taught that the soul was seated in the brain; Woolaston, in his Religion of Nature, defended; Grove, in his system of Moral Philosophy, taught the same thing; and Bishop Brown, in his Procedure of the Understanding, argues that the brain is the organ of the mind, because the same becomes fatigued.

But it may be asked, *How is it to be ascertained that the brain is the organ of the mind?* The answer is simple, and may, perhaps, be seen most naked in its simplicity, by presenting another question, *How do you know that you see with your eye?* Let every one ask himself this question. "Why, I see with my eye, that I do," will the matter-of-fact man say: but the reflective man will inquire, and he will perceive that he sees with his eye, because whenever his eye is injured his sight is injured; whenever his eye is closed his vision is closed; whenever his eye is destroyed his sight is destroyed; and he, perceiving this coincidence to be constant, infers, from this constancy of coincidence, causation. Now, suppose we find that a similar constancy of coincidence exists in reference to the state of the brain and the state of the mind, have not we a right to infer a similar causation? In other words, suppose whenever the brain is injured the powers of the mind are manifested as injured: whenever the brain is imperfect, as in idiots, the mind is manifested as imperfect: whenever the brain is absent, there is no manifestation of mind, is it not right to conclude that the brain is the organ of the mind?

In an attack made in the Edinburgh Review, some years since, by the celebrated advocate Jeffery, now Lord Jeffery, upon phrenology and phrenologists, the question was put forth, *Why not the mind in the heart, since the mind is injured when the heart is injured, and death ensues when the heart is wounded?* The answer is very simple—Individuals have been born without brains, indeed without any heads, having only the face, but with hearts, and yet these individuals did not manifest any intellectual or other mental powers. And animals that have hearts like man, have not the same intellectual and moral powers: but they have differences in their brain, as the lengthened observations of Dr. Vimont have shown, in agreement with the deficiencies, as compared with man, of their mental manifestations.

It is true that cases have been recorded, in which individuals, who have lost a portion of their brain, have not been affected in their intellectual powers. But these cases are fallacious, as will be shown in the next Essay, and a most interesting case, having reference to this point, will then be related.

Having thus established the first proposition, That the brain is the organ of the mind, having explained many terms in connection with the same, it may be advantageous to proceed to the second proposition, namely, THAT DIFFERENT PARTS OF THE BRAIN HAVE DIFFERENT FUNCTIONS.

This proposition grows out of the former. It is the experimentum crucis of phrenology. The mind is one we all feel, its manifestations are several we also feel. This unity of mind is quite accordant with plurality of manifestation. It is quite accordant with many other analogical circumstances. Thus, life is one, but this life, acting through different organs, produces different results. Thus, acting through the liver, it secretes bile; acting through the lachrymal gland, tears; through the salivary glands, saliva.

So with the mind. The mind can be conceived as existing independent of a brain. But the mind cannot act in *this* world without a brain: and if it cannot act without a brain, is it not rational to infer that the different manifestations of mind must be dependent upon different functions, being possessed by different parts of the brain?

Phrenologists have discovered these, and the figures on page 9, represent these various parts, commonly called *organs*, which may be viewed as so many receiving vessels of mind.

In these four figures it will be observed, that some of the organs are *blank*, some have *horizontal* lines, and some have *perpendicular* lines. These having *horizontal* lines are generally defined as organs of the *animal* feelings; those with *perpendicular* lines, organs of the *moral* feelings, and those which are *blank*, organs of the *intellectual* powers. These distinctions are not to be regarded as very philosophical, indeed it will be found, that, in these figures, some liberties have been taken in reference to classification, the reasons of which will be hereafter stated. The numbers attached to the several organs will be explained as the examination of the individual organs is proceeded with.

The discovery of these organs has been effected by the labours of Gall, Spurzheim, Simpson, Mackenzie, Crook, Hoppe, and others: and the evidence upon which the belief in their existence is based, may be prefaced with advantage by some analogical statements bearing upon the second general proposition.

In regard to these analogies, the first appeal is to be made to the *mechanical*. Look at the musical instrument called an *organ*. Are not its sounds, different and numerous as they are, produced by the same *wind* passing through *different pipes?* The sound is dependent primarily on the wind: the *differences* upon the *modifications* produced upon the wind in passing through the pipes through which it is transmitted. The wind may exist without the pipes, and the pipes may exist without the wind: in either case, the

wind would not be manifested in musical sounds: but when the wind acts through the different pipes, different sounds are produced. Yet no one supposes that the sounds are the result of *different winds*, but merely of the same wind existing in differently shaped pipes.

So, the mind, acting through the different parts of the brain, produces different mental manifestations: acting through those parts of the brain, situated *behind the forehead*, produces *intellectual* manifestations; acting through those situated at the *upper* part of the head, produces manifestations of the *moral* and *religious* feelings; acting through those parts situated *behind*, produces manifestations of the *animal* feelings.

But it may be objected that the various parts of the brain, called technically, *convolutions*, are so similar in structure, that it is difficult to conceive, that such opposite functions should be possessed by parts apparently so similar.

This objection, it will be perceived, is founded upon the assumption, that, in order to a difference of manifestation there must be to man a perceptible difference in structure, and that we are to be judges of that amount of difference which is necessary. This is a most absurd and daring assumption. Who, on looking at a grain of corn and at an acorn, would infer that the one would generate a stalk of wheat, and the other a splendid oak? But the assumption is daring; it proceeds upon the fallacy generated by our self-esteem, that our vision is so accurate as to enable us to perceive, with microscopic power, all the differences which exist. It is *man* telling the *Creator* that, if the Creator does not give him powers so as to be able to discover a difference in structure satisfactory to him, in accounting for the difference in function, he will not believe in the existence of difference in function.

But the objection can be met by a fact, which has been established as true, by an opponent to phrenology, Sir Charles Bell. This individual, who has sought opportunities to attack phrenology, and who shall have the honour of having his name recorded as one among many instances, in which men of talent have opposed the progress of truth, because "the light did not come in at their casements," has, by his experiments, established that that part which has been already referred to under the title of the *spinal cord*, is composed of *three* distinct columns, joined together so closely a little below the surface of the cord, that it is impossible to separate them. Sir Charles Bell has further satisfactorily demonstrated that the nerves, which arise from these three columns, have quite different duties, or functions. Those arising from the anterior or front column, communicating to the parts they supply the power of *motion;* those, arising from the posterior or back column, communicating to the parts they supply the power of *sensation;* and, those arising from the middle column, the *respiratory* power. Now these three functions, as possessed by the individual nerves, arising from these separate columns, are, it is evident, different from one another; but, yet Sir Charles Bell has never been able to discover any difference in the structure, either

of the nerves themselves, or of the columns whence they originate, to account for this great diversity of functions. The following are his own observations :—

" If we take up a nerve to examine it, we find that it consists of " distinct filaments ; but there is *nothing in these filaments to dis-* " *tinguish them from each other*, or to declare their offices. One " filament may be for the purpose of sensation ; another for mus- " cular motion ; a third for the combining the muscles in the act " of respiration. But the subserviency of each one of all these " filaments to its proper office must be discovered by following it " out, and observing its relations, and especially its origin in the " brain and spinal marrow. In their substance there is nothing " particular. They all seem equally to contain a soft pulp, enve- " loped in cellular membrane, or pia mater, and so surrounded " with a tube of this membrane, as to present a continuous track " of pulpy nervous matter, from the nearest extremity in the brain " to the extremity which ends in a muscle or in the skin."—*The Nervous System of the Human Body, by Sir Charles Bell.*

What right then have we to assert that, because we cannot discern any palpable difference in the structure of the various parts of the brain, explanatory of the difference in their functions, that it is impossible that different functions can be connected with different parts of the brain ?

Another analogy, as connected with the *five senses*, may be referred to as satisfactorily demonstrating that a difference in structure not being perceptible to us, is not a justification of the denial of difference in function. It is well known that the power of vision is dependent upon the optic nerve, which supplies the eye and expands upon the back part of the eye : that hearing is dependent upon a nerve, called the auditory, which is spread over the internal parts of the ear : that smell is dependent upon the olfactory nerve, which is spread over the membrane which lines the nostrils : that taste is dependent upon another nerve, called the gustatory, which supplies the tongue. Now no person can show any difference in these nerves, which will explain the difference in their functions ; and yet this difference is acknowledged by all.

But if it be right to refuse credence in the one case, because a difference of structure is not perceptible, surely it is rational in the other case, in which the refusal is not sought or given.

HE, WHO COMMENCED THE CHRISTIAN ERA.

" The Saviour came not with a gaudy show,
Nor was his kingdom of the world below ;
The crown he wore was of the pointed thorn :
In purple he was crucified, not born.
They that contend for place and high degree
Are not his sons, but sons of Zebedee."

The Good Parson.

On Digestion.—*Hunger and Thirst. Wisdom of Creator. The nature of Food. The point in which the phrase "One man's food another man's poison," is true.*——Mastication. —*The Jaws. Teeth. Salivary Glands. Muscles. Practical Remarks. Necessity of keeping the teeth clean. Of masticating the food. The necessity of avoiding drinking when the mouth is full of food. The phrase "Drink when I'm half done."*

Every individual is well acquainted with the fact, that, in order to support life, it is necessary that he should *eat* and *drink*. The appetites of *hunger* and *thirst* are continual testimonies to the fact, and not only testify but imperatively call upon the individuals to satisfy their demands. These appetites are thus the protectors of our existence, and, in attention to their commands, the Creator, in His benevolent wisdom, has associated pleasure. He might have so constituted us that while we ate and drank, we should have had no peculiar satisfaction, but merely have supplied a quantity of food and of drink as a kind of thing that *must* be and not as a thing that we *liked* to be.

Every individual is further aware, that, after he has eaten and drank a proper quantity of wholesome and substantial food, he is refreshed, he is nourished, and is able to attend with pleasurable satisfaction to the duties of life. He feels well after this supply. Yet how few know why they feel well: how few are aware *how* they are nourished, *how* their strength is supplied: and how little do most think of the various processes which the food taken must pass through before it can be brought to the condition necessary to nourish the individual. The following Essay will detail these, and, in detailing them, the Essayist hopes to be able to interest the reader, because this part of man's organization exhibits so very strikingly the wisdom of the Creator.

And, first, it is necessary to remark that *food* is food because the Creator has established a *friendly* relation between the *human body* and those articles called food. In other words, the reason why bread nourishes and arsenic poisons, is not because bread is in itself nutritious, or arsenic in itself poisonous, but merely because the Creator has established a relation between the human system and the bread, by which the bread nourishes; and a relation between the human system and the arsenic, by which the arsenic poisons. There are numberless relations of similar natures: and it is man's business to find out these relations and to obey them: in other words, he is to discover, by lengthened observations, those laws which are appointed by the Creator to regulate the various actions of the various bodies by which he is surrounded on his system.

A phrase, which is very commonly used, is properly noticed

here, namely, "*What is one man's food is another man's poison.*" Now this is true in the sense noticed above, namely, that the laws regulating the action of foods upon different human systems are so various, that that food which is placed in a friendly relation to one man's system is placed in an unfriendly relation to another man's system. This expression, however, must not be understood as at all to justify the common opinion, that there is any uncertainty in reference to foods themselves. There are two parties to the food, namely, the *food itself* and the *human system*. Now the *food* may remain the same and does remain the same, but the human system may vary. It is the variation in this system that occasions the different kinds of food to be necessary: and these variations are of two characters, *natural* and *diseased*. In reference to the natural, the fact that babes cannot be fed upon *beef*, but upon *milk*, is well known. Now, no one will say that the *beef*, the one party to the nourishment of the being, is not good: but the observer will readily acknowledge, that the other party to the nourishment, the human system, is not in a state to be friendlily acted upon by the beef; whereas it is in a state to be friendlily acted upon by the *milk*: in other words, the Creator has appointed a law by which milk is made to be in a friendly relation to the human system in its *infantile* state. To some persons who enjoy perfect health, vegetable food is best suited; animal food does not agree with them. The appetite, in these cases, is the best criterion. How foolish, then, to force young people to eat animal food instead of vegetable, or vegetable instead of animal, or fat instead of lean, or lean instead of fat.

The greater variety, however, of the cases, where different foods disagree, is dependent upon the *diseased* state of the human system. Hence, in sickness, we behold the great fancifulness of appetite. We find individuals who labour under various disorders who cannot eat pork; others cannot eat radishes; others cannot touch lobsters without having an extensive rash over the body; others cannot eat honey without being excessively disturbed in their bowels. In fact, when we consider that all human beings have the same parts, constituting the human system, we must readily perceive that the same foods must, to a very considerable extent, suit all: and it is generally an indication of approaching disease, when a person feels his appetite craving for what are defined "*nice things*."

In regard to the conversion of *food* into *nutriment*, called Digestion, several interesting matters must be noticed. The first circumstance that strikes the attention is, that the processes necessary to effect this conversion, are so very numerous.

The first process to be noticed is Mastication, commonly called Chewing.

This process, which seems so simple, and what almost every one does without thinking, is, in reality, a number of processes. In this process, the following distinct parts are engaged:—1st. the Jaws and their Muscles; 2nd. the Teeth; 3rd. the Salivary Glands; and 4th. the Tongue.

It may be useful to notice these more particularly, as such notice may lead to exalt in our estimation the all-wise Creator, and also may tend to make us more careful in performing this important part in the process of digestion.

And first, in regard to the *Jaws*. On observing the motion of these parts, it will be perceived that the upper jaw is *motionless*: the lower jaw is that which has the power of motion. The upper jaw is, therefore, the *anvil* on which the lower jaw acts: and the wisdom of this (putting aside the ugliness which would arise from the motion of the upper jaw) will be seen, when we reflect upon the point at which the *muscles* are fixed which move the jaws. These muscles arise on the side of the forehead, behind the temples; they pass under the cheek bones, and are fixed into the lower jaw, and may be observed by any one who watches another while eating, when these muscles are called into action, moving the jaws up and down.

The jaws are bones, and in persons who have lost their teeth, by their hardness, dependent upon this bony fabric, supply, to a certain extent, the want of teeth.

These jaws are for motion. The motions are effected by the muscles; but to render these motions effectual to the reduction of the food to a soft mass, the jaws are endowed with parts, called Teeth; parts of the most essential service in producing one of the many changes, produced upon the food, previous to its conversion into nutriment.

These teeth are *thirty-two* in number: *sixteen* in each jaw. They are divided into three groups: those in the front, seen, on opening the lips, directly in the centre of the mouth, called, from their cutting or sharp edges, the *cutting* teeth, or the incisors: these are intended for cutting the food. On each side of these is another set of teeth, called the *canine*, which *tear*, so called from being large and well marked in dogs: these are to tear the food after it has been cut by the first set. And then, after the food has been cut and torn, it is necessary that it should be *ground*. To effect this object there is a third set of teeth, very strong and firm, situated still further back in the mouth, called *grinding* teeth or molars; because their shape and breadth of surface are such as to enable them to effect the process of grinding very accurately. Indeed, if any one will look at the teeth, a vivid perception of the suitableness of the various sets of teeth to these various duties will be immediately apparent to the mind.

Another set of organs or parts engaged in the process of mastication are the Salivary Glands, that is, glands which separate from the blood that which is commonly called *spittle*, technically called *saliva*. There are three on each side: one called *parotid*, situated immediately under the ear, having a tube or duct terminating in the mouth just in the centre of the cheek. The other two, called the *sublingual* and the *submaxillary*, are both situated under the lower jaw bone, one being inside the other outside, emptying by pipes into the mouth. The peculiar situation of these is worthy of notice. It will be perceived that whenever the lower

jaw is moved, these glands must be acted upon by the motion. Thus they are called into activity, and pour the saliva, which, it is essential should be mixed with the food, in order to render the food fit to be introduced to the stomach, where it passes after mastication.

But the action of these glands in secreting and pouring out the saliva, is not altogether dependent upon the motion of the jaws, but upon a power called *vital*, because connected more particularly with the state of mind. Thus, the common phrase, "*Water in the mouth*," is quite correct: for when food is presented to the individual, the salivary glands are called into activity, notwithstanding the individual has not tasted the food. This has been observed to be the case in individuals, who, from disease, have had the cheek so ulcerated, that the duct from the parotid gland has been perforated. In such individuals the saliva runs down the cheek, and, when any food that pleases was presented to these individuals, the saliva ran in increased quantity.

To show the effect of the motion of the jaws in promoting the secretion or separation of the saliva from these glands, the increased quantity of saliva when an individual is speaking, may be noticed. Persons, who are not aware of this fact, have often expressed their astonishment at the capability of speakers continuing their orations so long without taking any thing to drink. They forget that God has provided drink: He has made three *cisterns*, which are ever ready for man's use, unless he has destroyed their activity by the habit of smoking.

In regard to the motion of the jaw itself it is interesting to know, that, in order to facilitate the motion between the lower jaw and the upper, there is introduced between the two surfaces which work upon one another, a *moveable cartilage*, hollowed on both surfaces.

The food has thus been cut, torn, ground, and mixed with the *saliva*.

It is now spread all over the surface of the mouth, and the duty of the tongue now becomes apparent. The tongue is a mass of flesh, called muscles. These muscles are six at least, three on each side, and from the points at which they arise, and in which they are inserted, give the tongue the various motions that every one must be aware this, in one sense, unruly member, has. The tongue collects the various particles of the food from the various parts of the mouth, and, after forming a mass, raises itself in an inclined direction for the purpose of sending the food into the stomach, by means of a tube, called the *gullet*, also the œsophagus. But as this process of *swallowing*, called *deglutition*, has many interesting circumstances connected with it, the consideration of the same will be undertaken in the next number: it being the intention of the Essayist to conclude with some practical remarks.

Practical Remarks.—1. It is quite evident from the statements made that the condition of the teeth is essentially connected with the condition of the food previous to digestion. Hence, how

important that care should be taken of the teeth in the earlier periods of life. Not that we are to be always running to dentists, to have our teeth destroyed by their excess of care, but that we should ever attend to keeping the teeth clean. Clean teeth are essential to pleasantness of breath; and cleanness of teeth is essential to the preservation of the teeth. The writer of this Essay was once much troubled with *toothache*. He adopted the practice of cleaning his teeth with a tooth brush and tooth powder, and he has had no toothache since.

2. Another truth equally apparent is, that, as the teeth are essential to the *cutting*, *tearing*, and *grinding* of the food, it must happen that infants, who have no teeth, and old people, who have lost their teeth, should not be fed upon the *solid foods* that adults, or those that have teeth, can be fed upon. Hence the impropriety of loading infants with *pig*, and others matters so frequently given by ignorant people.

3. Another practical fact that must be apparent is, that the habit of *bolting* the food must be very injurious: since, in this case, the food is neither properly cut, torn, or ground by the teeth, nor mixed with the *saliva*.

4. Another practical fact which is taught by these statements is, that it is wrong to take liquids into the mouth when it is full of food. The saliva is the proper liquid to mix with the food. We can drink when the mouth is empty. The drinking is often an inducement to eat more than the stomach can bear: hence the common phrase, "I will drink when I am half done;" whereas the gourmand should feel that he had eaten enough long before he came half-way to the goal of full pamperedness that he longs to reach.

(To be continued in the next Number.)

PROSPECTS.

The horizon of the world is beclouded. Ignorance and Despotism, twins, begotten by the monster Power upon the monstress Vice, have raised themselves. The endeavour is being made to crush, by one bold and desperate effort, the cry for liberty, for improvement, and for happiness. At Kalisch, Russia has assembled her hosts: in Spain, Carlos has opened up his banner: in Paris, Louis Philippe, the deceiver, is planning against the great means of human improvement: in England, the Lords are mutilating every measure by which corruption would be destroyed. Such are some of the proceedings which disturb men's minds at the present period. But what have the good to fear? They know that the progress of human happiness cannot be stayed; they know that the power of opinion is omnipotent against the power of mere physical force; they know that when men know their rights they will enforce them; they know that freedom and virtue must co-exist, and that vice and despotism

must remain allied. They, therefore, are not astonished, but feel it to be their duty to use every exertion to diffuse a knowledge among their fellow-men of the elevated destinies of their nature. They, hence, seek to favour every proper expression of opinion, every generous utterance of benevolent sympathy. They look for peace only where peace is to be obtained, namely, in the removal of the causes of discontent, and the implantation of the means of contentment. Hence their plan is peaceable, but persevering: in its furtherance, mildness is mixed with firmness: and virtue, individual virtue, as necessarily associated with national happiness, is ever before the view. Who can despair under such convictions? Who can do otherwise than feel complacently at the vain, though furious, attempts to impede the progress of human improvement? We march on in our career: our banner is a noble one, "Peace on earth, goodwill among men, and glory to God in the highest:" our war cry is "Improvement:" our weapons are reason and bold utterance: and our success is sure.

THE RIGHT OF BISHOPS TO SIT IN PARLIAMENT.

In the Parliament of Northampton, under Henry II., when the bishops challenged their peerage,* they said "*Non sedimus hic episcopi sed barones.*"—"We sit not here as bishops, but as barons." We are barons, and you are barons here, therefore we are peers. Nor did King Charles himself apprehend the bishops to be one of the three estates; for, in his declaration of June 16, 1642, he calls himself one, and the Lords Spiritual and Temporal, and the Commons, the other two. In ancient times, the prelates were sometimes excluded the Parliament, as in 25 of King Edward I., when they would not agree to grant an aid to his Majesty in the Parliament of Carlisle; and before that time several Acts had passed against the oppression of the clergy, of which the entry in the records stands thus:—"The King having consulted with the earls, barons, and other nobles, or by the assent of the earls, barons, and other lay people;" which shews that the bishops did not consent, for if they had, they would have been first named; the order of nobility, in all ancient records, being prelates, earls, and barons.†

When the convocation had cited Dr. Standish before them, for speaking words against their power and privilege, in the 7th of Henry VIII., it was determined by all the judges of the land, in presence of the king, that his Majesty might hold his Parliament without calling the bishops at all. It appears, therefore, from hence, that the bishops never were accounted a third estate of the realm, in such a sense as to make them an essential branch of the legislature.—*A History of the Romish and English Hierarchies, by James Abbott, A. B. p.* 313.

---

* See Fuller's Appeal.

† Rushworth, part iii. vol. I, p. 396.

FIG 4

Bartolozzi & Morland lithog.rs 24 Birch

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

OCTOBER 1, 1835.

OBEDIENCE AND HAPPINESS—DISOBEDIENCE AND MISERY.

In the essay in the preceding number an attempt was made to illustrate the truth, That the Creator has established certain *laws* for the regulation of the various agencies acting upon man's physical and organic constitution. These laws, it was shown, are for man's good; producing, when obeyed, man's happiness: when disobeyed, man's misery.

The object of the present Essay is to extend the consideration to the *moral* part of man's nature, establishing that there are certain laws, appointed for the regulation of that nature, and, that these, if attended to, are the means of happiness: if unattended to, the sources of misery.

To suppose the contrary, would be to imagine, nay not only to imagine, but even to maintain, that the moral world is not regulated by laws, but depicted by the finger of chance; a position, which no one who considers how much more exalted are the influence of the moral universe, compared with those of the physical and organic world, will ever take.

As such laws do exist, and as obedience is attended with benefit, disobedience with injury, how important is it that we should understand these laws, regulating the moral government of the universe; which laws constitute in the knowledge what is called MORAL TRUTH.

It may be proper to remark that the punishment attached to the violation of the moral law, not being so immediately attendant as is physical evil, as connected with the violation of the physical law, often induces the hope, on the part of the violator, that he may escape the punishment. It is true, notwithstanding, that in some instances, we have such striking evidences of the punishment consequent upon the violation, and happiness upon the obedience to the law, that the regularity of the Creator's plans is demonstrated, and the delusion, so injurious to virtue, and so encouraging to vice, is dispelled.

Indeed, in relation to this point, it is interesting to notice the fact, that the most successful novel writers have adopted the general principles in their writings of making suffering virtue at last triumphant, and vice at last punished; thus, recognizing the

principle that obedience and happiness, disobedience and misery, are intimately allied.

An example may now be given of the operation of the moral law. The Deity has appointed to man to be "fruitful," to "multiply," "and replenish the earth."

With this particular end in view he has implanted in man certain feelings, which have the end of their creation, when, of the two, male and female, it can be said "*they twain are one flesh.*" These feelings, when exercised in the legitimate way, that is, in a way accordant to the laws regulating the moral government of the universe, are productive of the purest joys that man can have: namely, the joys of domestic friendship, with the superaddition of animal pleasure. Here the feelings are productive of happiness, because the moral law is attended to. But, if the individual gratify his natural, his proper, his, in itself, heaven-appointed feeling, in an improper way, that is, in a way not accordant with the happiness of others, in other words, in opposition to the law of the Creator, as written in his moral constitution, he becomes liable to disease, poverty, and death: or, as Solomon so forcibly states, "till a dart strikes through his liver." What a striking instance of this is afforded in the case of *Steinberg*, who lately murdered his concubine, his natural children, and himself.

It is true that individuals who violate the law in this respect, may apparently escape these bodily punishments: but there is a *mental* punishment. There is perhaps the blood of two unfortunate husbands on their *hands*, and, in the midnight hour, on their conscience. They may appear to pass along unconcerned—the world may smile apparently on their career: but enter with them into their retirement, a state which they dread, and behold their communings with their own souls, and then the majesty of the moral law will be seen to vindicate itself. The writer of this has seen such violators of the moral law on the bed of sickness and of death—has heard their ravings—and has been horrified by the awful descriptions they themselves give of their iniquities.

Many other illustrations might be given of obedience to the moral law being attended with happiness, disobedience with misery. But as the object is simply to establish the certainty of these results, and as sufficient, it is imagined, has been stated to this effect, it may be proper to conclude this brief statement of views by a few remarks, applying to the objects of the Christian Physician.

It is the opinion of many connected with the Christian Physician, that many of the laws which the Creator has appointed for the regulation of Christians are neglected by Christians: a neglect evidenced by the fact, that a vast majority of Christians feel that they do not obtain happiness. They pray for peace to their souls: but they neglect the laws which God has appointed as the source of peace, and in praying for peace and for growth towards the manhood of the Christian character, while they neglect the laws which are intended to develop this character, insult the Deity, being the requesting of Him to set aside His laws, and to let them obtain the benefits of obedience to His laws without obeying them.

DISTRESSING ACCIDENT—VIOLATION OF THE PHYSICAL LAW.

In the preceding Number, page 8, a most distressing accident was recorded. Such accidents are called the *visitation of Providence:* and they are passed by without deriving that practical instruction which might otherwise be deduced from them. The feeling seems to be that as it was the visitation of *Providence*, therefore, all that we have to do is to submit: and a neglect of the means by which such visitations might, in future, be prevented, is produced.

Now, in truth, such accidents are not visitations of Providence in a special manner. They are the visitations upon the individual or individuals of the laws, which the Creator has appointed for man's good, and which are for man's good as long as he obeys. If man obeys the law, the visitation of Providence in the law is kind: if he disobeys the law, the visitation of Providence in the law is injurious. But the same law is always operating. Thus, in the case referred to, the law is that water will support a body in itself equal to its own weight. Thus, man being lighter than water can float on the water, that is, if he can so place his body as to bring it into the condition of being in such a relation to the water as to be not greater in weight than the bulk of water by which the body is to be supported. Man, therefore, before he goes into water which is deeper than his height, must have learned so to place his body, that its position will be such that the weight of his body is less than the weight of a similar bulk of water: in other words, he must learn to *swim:* if he knows how to swim then he can put himself in obedience to the law, and can derive the benefit from the exercise of swimming. Swimming is therefore nothing more or less than motion of the body in water, in accordance with the law that a bulk of water will support any body of a less or equal weight. It is true that the best swimmers are drowned: but this is because they violate other laws, regulating the actions of external agents on the human body. Thus, if a man, when fatigued with swimming from remaining too long in the water, comes into very cold deep water, the nervous system, from the exhausted state, is not able to resist the effect of this sudden application of cold, *cramps* come on; that is, irregular muscular actions are produced by this shock upon the nervous system: he is no longer able to keep his body in a friendly relation to the law, and he sinks as a necessary consequence.

How necessary then it is that parents should let their children be taught *swimming*. Many say that children should not go into the water at all. But children will go into water: and, if instead of terrifying children by telling these sad tales of drowning, parents would teach them the laws regulating the agency of water upon the body, then the child would be led to obey the laws and to avoid danger, because his understanding has been enlightened.

THE BOOK OF MOLOCH.

Chapter I.

1. And the Ammonite, too, had a Church Establishment, and the God of the Ammonite was Moloch.

2. And the temple of Moloch was a stately temple, overshadowing all the land.

3. Its pinnacles lifted themselves unto the stars; the foundations thereof were laid in Tophet.

4. The altar was of beaten gold, even as the shrine of Mammon; the trench round about the altar was full of blood.

5. This was the blood of the poor of the land, who were slain evening and morning, as a sacrifice of a sweet smelling savour unto Moloch.

6. For he loved not the blood of bulls, or of goats; neither was the fat of lambs pleasing to him.

7. His delight was in human sacrifice.

8. And the priests of Moloch were a great multitude; men of blood were they from their youth up; their hands were full of violence, and their mouths full of lies.

9. Shepherds were they who devoured their flocks. The sheep said, give us wolves rather.

10. Better are grievous wolves, and more bearable than such shepherds: how long shall they be permitted to tear us?

11. And there went a cry through all the land, even the cry of the poor, an exceeding bitter cry, against the priests of Moloch.

12. For they said unto the people, give us a tenth of the labour of your hands, and of the sweat of your brows, and of the fruits of your fields and vineyards.

13. And if ye give them not, we will call upon the king of the country, and he shall send his men of war, and they shall smite you with the edge of the sword, and all that you have shall be ours.

14. And we shall bind your children hand and foot, and offer them on the altar of our God, and their blood shall be upon the altar, and none shall help them.

15. Then shall ye know that we are Moloch's servants; in your affliction shall ye know it.

16. Then said the people unto the priests, we are a poor people; if ye take from us the little that is ours, we shall not live, but die.

17. Moreover, is your God our God that we should bring gifts unto his altar?

18. Be it known unto you, oh priests! that we are Christ's servants; shall we worship Christ, and shall we pay tithes unto Moloch? Far be the sin from us, ye priests of blood?

19. Then did the priests gnash their teeth, and their fury was like that of wild beasts.

20. And they wagged their heads, and said unto the people, who are ye that ye should so answer us ?

21. And the people made answer and said, we are people of the land, and not dogs.

22. Is not this land ours and the land of our fathers ? Who are ye that trouble us ?

23. Verily ye are the children of the spoiler ; your God is a God of rapine ; a strong hold of robbers is his temple.

24. Then rent the priests their garments, and were as chafed lions, and as she-bears robbed of their cubs.

25. And they communed with themselves in dark places, and said, if the people prevail against us there is an end of our feasting ; how shall our goblets be full ?

26. Our kitchens shall be desolate, and the fat paunch shall be turned into a lean belly.

27. Let the poor be delivered from us, and our hands shall be no more in the savoury dishes, even in the savoury dishes that we love.

28. Yea, we have loved them always, as doth a mother her sucking child, and as a father the son of his old age.

29. What shall we do if they be taken from us ? We shall eat bread, and we shall drink water, and are these priests' victuals ?

30. We shall labour also with our hands like honest folk, and of our sorrows there shall be no end.

31. All these things shall come upon us, if the people prevail ; therefore let us defend the spoil.

32. And the high priests stood up also in that day ; all the hierarchy of Moloch, with raiment upon their backs of purple and fine linen.

33. Possessors of the land were they in the length and breadth of it ; their dwellings were in kingly palaces.

34. They rode in chariots, like mighty men, in chariots glittering with gold.

35. Long was their retinue after them : legions of cooks and cup-bearers.

36. Those who approached them called them lords ; for they were lordly both in spirit and in understanding ; when the princes and the nobles sat down together, none were so mighty to darken counsel.

37. Goodly were they to look upon ; in their girth round about their loins none were like unto them.

38. Such were the high priests of Moloch, marvellous at the feast in their generation.

39. And they stood up in the day when the priests were gathered together in the dark places, and they cried with one voice, Hosannah to Moloch !

40. Hosannah to the God of the bloody altar ! by him kings reign, and proctors commit rapine.

41. Tithes are in his left hand, and in his right hand guns and sabres.

42. He is not the God of the poor, but of the rich; the poor are the sacrifices of his temple.

43. In him putteth the spoiler his trust; all they who do nothing and eat plenteously call upon him.

44. He filleth his servants with good things; and the people he sendeth away empty.

45 His coming is with the sound of drums; his way is as the path of the destroyer; the vulture hovers over it.

46. A fertile land maketh he barren; he findeth peace, and he saith, let there be war and tumult.

47. He speaketh and there is strife; the breath of his nostrils is discord.

48. He poureth out his spirit upon us his ministers; then do we show forth his doctrines.

49. Justice is our abhorrence, and as to truth, we will have none of it.

50. As the bat hateth the morning sun, so hate we the light of knowledge.

51. Who is he that troubleth us? Who is he that bringeth wrath upon our priesthood, and shaketh the pillars of our temple? Even he who hateth Moloch, and giveth understanding to the people.

52. Away, therefore, with light from the earth; away with light and knowledge.

53. And all the servants of Moloch answered with one accord, away with it, away with it.—*Examiner Newspaper, August 23rd* 1835.

A painter, who claimed the title without possessing the necessary qualifications, having painted a horse, wrote beneath the picture, "A horse." Beneath the above picture a descriptive title is not necessary to inform the reader,

WHAT IS THE ORIGINAL.

DAY AND NIGHT.

Lightness and veiled Darkness, sisters twain,
Hold momentary converse morn and eve:
Lightness attended by her gorgeous train
Of sunbeams, and that single star, whose reign
Lasts longest in the sky. The Pleaids grieve
Around the grace of Night; Orion mourns,
And dim Arcturus pours his flowing urns.
The Comet's lurid homage decks her brow!
Upon the mountain heights the sisters meet,
When glistening pearl-dews cool their glowing feet.
They part—where venturous vessels never plough
Old Ocean's utmost waves.—'Tis very sweet
To conjure up their greetings, voiceless given,
Farewells, and welcomes, blush'd across the heaven!

From the London Journal.

PHRENOLOGY, BY JOHN EPPS, M.D

Essay II.

The preceding Essay was concluded by illustrations, having for their object, the demonstration that a want of a difference of structure, recognizable by human optics, does not at all justify the denial of a difference of function in parts, to those optics in appearance similar. These illustrations, drawn from the spinal cord, the five senses, and from other sources, were urged in reference to the difficulty, considered by many to exist in the circumstance, that the convolutions or parts of the brain are so similar in appearance, and yet so very different in function.

This second Essay cannot be commenced better than by adopting another method of demonstration in reference to the proposition now under consideration, namely, *That the different parts of the brain have different duties or functions* attached to them.

A theory which is nothing more or less than *a deduction or a series of deductions from facts*, is considered to be correct just in proportion as its principles are capable of being applied in explaining the facts connected with the theory. It will be therefore for us to consider whether the facts presented by the mind, in its manifestation, whether diseased or healthy, are explicable more satisfactorily upon the phrenological theory (that the mind acts through the different parts of the brain at individual times), or upon the other theory (that the mind acts through the brain as a whole): in other words, that, whenever the mind acts the whole brain is rendered active.

The facts connected with insanity, dreaming, variation in study, as affording mental relief, and also some in reference to injuries to the brain, will be brought forward in this investigation.

In regard to *insanity*,

An individual is very rarely universally insane. Indeed, every one, who has been in the habit of visiting establishments for the reception of the insane, must have felt astonished at the sanity of many individuals therein confined. So much has this feeling been awakened, that many have retired from these establishments with a deep conviction that the common opinion, that individuals are placed in these receptacles to gratify the avarice of rich uncles and cruel step-mothers, is justified by facts. This may be the case, but there can be no doubt that many persons who exhibit sanity for hours are insane. That is, a man will talk to you for some time with perfect rationality: and then, when his mind happens to be directed into the channel of his wanderings, his insanity becomes as evident as previously was his sanity.

Now, how can this be explained according to the theory, that *the mind acts through the brain as a whole*. It is impossible, because how can the brain be in that state at one moment so to

allow the exhibition of a sane state, and at the next moment of an insane state. Taking the phrenological theory, that the *mind acts through the different parts of the brain*, the solution of the contrariety is by no means difficult. Since, when the mind acts through the organs in the healthy state, the mind is exhibited sane: when acting through the organs that are in a diseased state, the mind is exhibited insane. Just, in the same manner, as the wind acting through the pipes of an instrumental organ, produces, when the pipes are sound, musically harmonious manifestations; when acting through the pipes that may be cracked, produces unmusical (cracked) manifestations.

But the difficulties connected with the theory, that the mind acts through the brain as a whole, are rendered more decidedly apparent, when these facts in insanity, which exhibit sanity in the *intellect*, but insanity in the *feelings*, are considered. I remember a patient, who imagined himself to be God Almighty; and who, in the exercise of his power, thought proper to give one friend Europe, another Asia, and a third America. Now, here insanity and sanity met together. The insanity was in the diseased activity of his organs of self-esteem and perhaps love of approbation; these, diseasedly active, made him believe that he was God. His reasoning powers, exercising themselves upon this belief, came, and that with the greatest sanity, to the conclusion, that he would give away these parts of the world. This *conclusion* was perfectly rational and sane: the *premises*, namely, the belief, was irrational and insane.

How can these phenomena be explained upon the theory that the mind acts through the brain as a whole? In other words, how could the brain at one moment be brought into a sane and an insane state, that is, the mind requiring the whole of it at each action? The transition must have been rapid indeed. But, taking the phrenological proposition, that the mind acts through different parts of the brain, we can readily understand how the mind acting through diseased self-esteem, should manifest itself in the belief of its possession that he is a God Almighty: and it is equally easy to understand how the healthy intellectual faculties, reasoning upon these unsound premises, authorized the individual to give away three of the quarters of the globe.

Many similar illustrations might be given, indeed so common are they, that the fact of their occurrence has been made use of by an opponent to phrenology to communicate his opinion of phrenologists, whom he has described as individuals, who, like the insane, *reason accurately upon false premises*. The only reply to this taunt is to ask the opponent of phrenology to state how a man can reason accurately upon false premises, the mind acting every time it acts through the brain *as a whole*: surely the state of the brain that is connected with the recognition of the false premises, cannot be the same state, at the same moment, developed, which is connected with the accurate reasoning.

The phenomena of *dreaming* are strikingly confirmatory of the phrenological proposition.

Dreaming, WHICH IS THE INSANITY OF THE SLEEPING, is generally the lot, at one time or the other, of almost every individual. It evidently arises from some portions of the brain being in a more active state than others, for children rarely dream.

To see the bearing that dreaming has on this proposition, a dream frequently occurring may be taken for illustration. I fancy myself crossing a bridge: a crowd is pushing against me with great violence; there are no balustrades to the bridge, and I am on the point of being precipitated into the river below. The horror occasioned produces a convulsive struggle, I wake, and find to my great satisfaction that I am on my bed, and resting my head upon a soft pillow. Now, in my dream, I had as firm a belief that I was on the brink of the bridge without balustrades and the crowd pushing me, as I now have when awaked, that I am safe on my pillow. How then is this belief to be explained? The answer is clear, if we adopt the phrenological principle, that the different parts of the brain have different functions; those parts of my brain which produce before the mind the perceptions of the bridge, the want of balustrades, the crowd pushing, are in a state of activity, or awake, while the other parts of my brain which would tell me where I really am, are asleep or in a state of inactivity. Now, directly I awake, that is, *bring the whole of the faculties into activity*, these latter become active, and they tell me where I really am. But this explanation cannot be afforded by the individual who maintains the theory that the mind, in all its actions, acts through the brain *as a whole*: the whole must be awake or the whole must be asleep: if the whole be awake the man cannot dream, if the whole be asleep, then also the man cannot dream.

The next point which may be referred to as illustrative of the accuracy of the phrenological proposition, is the *benefit connected with a change of study* in intellectual, and moral, and religious labours.

If we behold a horse standing in the street we find, that, when tired of standing on one leg he rests upon another, or varies his position. Why does he this? The answer is simple, He is tired of standing on this leg, or of this position. What does this, being tired, mean? Simply, that the muscles, which move the leg, or retain the leg in the position in which it was, have been kept in a state of activity for so great a length of time, that they require repose. But another set of muscles are ready to be called into action, and on these the horse can depend for another period of time: and thus he changes until the whole of his muscles are fatigued. But how much sooner would he become fatigued if the whole of his muscles in the act of standing were called into activity, or, at least into the same degree of activity.

To transfer these remarks to the faculties of the human mind. A person pursuing one branch of study, mathematics for instance, for two hours, becomes fatigued: he then turns his attention to *history*, his fatigue ceases. He reads history for two hours and his fatigue again returns: he then turns to *drawing*, and his fatigue again ceases, and, after pursuing drawing for two hours, fatigue

again takes possession of him. Here then is the occurrence of fatigue three successive times; and not only the occurrence, but by the passing away of the fatigue three successive times, the mind being in activity all the while. How can this be if the mind acts through the brain *as a whole?* It is impossible: because if the brain be fatigued once it must be fatigued altogether: you cannot take away fatigue by adding fatigue. *Plus* fatigue added to fatigue surely does not make *minus* fatigue. But taking the phrenological proposition, That the different parts of the brain have different duties to perform, it becomes evident at once, that as, in the one study, certain portions of the brain are rendered active, in the other, certain others, and in the third, certain others; that the first class have repose while the second is active, and the second is in repose when the third series is active. Thus the cerebral organs become fatigued, and gain repose, and the mind is enabled to persevere in its exercisings. How satisfactorily, therefore, does the phrenological proposition enable us to explain the phenomena of mind.

The phenomena of *idiocy* afford still further evidence of the truth of the third proposition. Place an idiot's head beside the head of a Franklin, and the difference is so apparent, that every one acknowledges that the one is an idiot, and the other a being of intellectual power. Whence does this spontaneous acknowledgment arise? Some at once assert from *physiognomy*. Oh no! it is from *phrenology*. It is from the observation of the constant coincidence between the miserably low forehead and idiocy, and the well-expanded forehead and intellectual power. The conclusion that the one is an idiot and the other not so, is therefore an internal reasoning, in perfect accordance with phrenological principles. In fact, every man is, of necessity, a phrenologist.

A circumstance may be recorded here, which bears closely upon idiocy, as illustrative of the proposition now under examination. When I was an apprentice, my master was sent for to open a pauper who died in Cripplegate workhouse. This pauper was about thirty-two when she died, and was idiotic from the day of her birth to the day of her death. She never had shown any intellectual power: when she wanted any thing to eat, she made a sound like an animal: when she was displeased she made a most peculiar cry. I was appointed to open the head; and, to my great astonishment, the instrument was buried in the skull before coming to any indication of brain. We forced off the upper part of the skull, and found, in the part of the skull, where the brain lying behind the forehead should be, no brain at all; but a cavity, traversing which were bony bars, forming a kind of lattice work. I knew nothing of phrenology then: but when that science was first brought under my notice by a lecturer on anatomy, a Mr. Sleigh, the case came vividly before my mind, and I at once perceived how strikingly the absence of those portions of the brain, situated behind the forehead, the organs of the intellectual powers, corresponded to the total want of intellectual manifestations on the part of the idiotic woman.

Another evidence in favour of the proposition, That different parts of the brain have different duties to perform, is afforded by the facts connected with *injuries to the head*, and *diseased conditions* of the brain.

It may be deemed singular to draw evidences from these sources, considered by most to afford evidences most decidedly unfavourable to the proposition propounded. But this is not the fact. Superficial observers have come to such a conclusion; prejudiced men have come to such a conclusion; many medical men broadly assert such a conclusion: but Nature asserts a conclusion quite confirmatory of the phrenological principle.

It is common for individuals to conclude that, because a man after an accident to the head, speaks rationally and answers when he is spoken to, and says "Yes," "No," and such similar phrases, that therefore all the powers of his mind are undisturbed and as perfect as they were before the injury. We often read in hospital reports of A. B. having fallen from a scaffold, and fractured his skull, was brought to the hospital quite insensible. He was trepanned, the portion of skull pressing upon the brain was removed, and he gradually recovered, and was dismissed from the hospital in the full possession of his intellect. Now, what is the basis upon which this judgment of the full possession of his intellect is founded? Because A. B. says Yes; No; knows his name; recognizes his acquaintance. If the man were looked after for years, it would soon be found that this full possession is a very imperfect possession indeed.

In order, however, to show how the facts, connected with injuries to the brain, demonstrate the truth of the third proposition, a case, peculiarly instructive, is now to be presented to the attention. A boy, aged nine years, was kicked by a horse in the forehead: he was taken up insensible, the skull was driven in in the situation of the organs of causality and wit on the right side of the head. He lost a considerable portion of brains, perhaps two table spoonsful. He was, by the skill of a medical practitioner in Kent, restored to health, went to school, and, though not bright, did his duties at school as well as most boys. He entered into business after serving an apprenticeship: and forthwith became liable to fits. The exercise of his reflective powers in arranging the business concerns awakened the affection of the brain produced by the injury, and thus the fits were induced. He found, moreover, that these attacks came on generally when his mind had most thinking to perform: and, also, if he could direct his mind into other channels just before the attack came on, he avoided the attack. The consequence arising has been that he has been obliged to give up business. Now, had any of the advocates of the opinion that persons may lose portions of brain without the powers of the mind being affected, seen him previously to his entering upon business, they might have brought forward this as a proof of the accuracy of their opinion.

There are two or three circumstances of interest in this case.

The first is, that the person was always very witty. He had that kind of wit called "dry wit."

Another circumstance was, that the injury was upon the organs of causality and wit, at the upper angle of the brow: and that whenever causality and the intellectual powers were much called into activity, the fits came on. In other words, when those parts of the brain were called into activity, the increased action not being allowed, as it were, a free exercise, the fits indicated the resistance.

Another circumstance of interest was, if he could turn his attention to any other subject he could keep off the attack; in other words, if he could call into activity other portions of the brain, these parts, that, from being in an activity unsuited to a state of health, the attacks would be relieved.

Many cases have been published in medical writings and the Phrenological Journal, where particular portions of the brain have been found diseased after death, the functions of which portions had, during life, been manifested in a diseased state.

Having noticed these facts in connexion with insanity, dreaming, change of pursuit, and injuries to the brain: having shown that these facts are explicable upon the phrenological theory, it may now be beneficial to give some positive facts illustrating the truth of these propositions.

In regard to the intellectual powers, we have only to refer to the outlines in the plate, showing the difference between an idiot's forehead (No. 1.) and Benjamin Franklin's forehead (No. 2).

In regard to the moral feelings, the figures No. 3 and 4 tend to establish most satisfactorily the difference between the highly developed moral feelings of Oberlin (No. 3) and of a thief and murderer (No. 4).

Numerous illustrations in reference to the animal feelings will be given in the course of these Essays.

As it is found that these coincidences are constant between the development of these parts and the manifestation of the faculties therewith connected, have we not a right to conclude that these parts are associated with these faculties, in other words, that the proposition is true, *That different parts of the brain have different duties to perform?*

Having thus fully considered the proposition, and having shown the various sources from which evidence can be derived, testifying to its truth, the fourth proposition, namely, *That the external form of the head is an index of the form of the brain*, will come next under consideration.

THE CORN LAWS.

It will be seen from our first number that we do not mean to restrict ourselves to any particular class of subjects. Every thing that has an influence on the present condition of man, or that may affect his future destiny, is eligible to a place in our miscellany. We shall, therefore, occasionally introduce articles of a political character—not such as have a reference merely to the squabbles of parties, but such as appear to us to have a direct bearing on the well being of the human race. All laws that are partial in their character, and consequently unjust, deserve to be brought under review, and subjected to calm and enlightened discussion, in order that the general mind may be made up respecting them. A number of Laws now on our statute book are of this description, which are suited to arrest public attention. We begin with the Corn Laws.

It has been the policy of our legislators for a long time past, to say as little respecting these laws as possible. They cannot fail to know that they are unjust in their nature, and oppressive to an extreme degree; but, in as much as they believe their own interest to be deeply concerned in maintaining them, and are quite satisfied that any alteration that may in future be made upon them must be of such a character as to render them less oppressive to the industrious classes of Englishmen, and consequently less beneficial to the proprietors of land, they wisely say nothing on the subject, so long as the people remain silent. Soon, however, these laws must come under the notice of our legislative assembly, and as every man in Britain is deeply interested, not only in the just administration of the laws that exist, but in the enactment of just laws by which his conduct is to be regulated, it is desirable that every man should understand the nature and tendency of those laws to which he must be subject. In order to assist in extending, as far as possible, a knowledge of the Corn Laws, we proceed to enquire into the *design* of their enactment, and the *effects* which they are calculated to produce and are producing.

1st. The object our legislators had in view in the enactment of the Corn Laws.

On this branch of the subject it will be of advantage to refer slightly to the history of these laws. We do not mean, that we should examine closely into all the changes that have been effected, but simply, that we should notice general facts, which have occurred at remote distances of time, all pointing to the same object.

During by far the greater part of the last century, the law respecting corn was the very reverse of what it is now. Our hereditary legislators had then the entire management of the affairs of the country. They were at the same time the makers and the administrators of the law, and let it always be kept in view that they are all landholders. All their property is in land, and with the excep-

tion of what they are able to draw surreptitiously from the taxes, their annual revenue is from the land; and, according to their own statements, they were omnipotent. We have all heard of the omnipotence of Parliament. In such circumstances, it would argue great ignorance of human nature to suppose that these men would neglect so favourable an opportunity for enriching themselves. They did not neglect it. So long as the production of this country was equal, or more than equal, to the consumption of the people, so long the Corn Laws awarded a premium on the exportation of corn. This premium, be it observed, *was paid out of the taxes* levied on the community, and it must be evident *that the effect of this would be to keep up the price of corn, at all times, to the whole extent of the premium, beyond its natural level.* No doubt landholders paid a proportion of those taxes, out of which the premium was paid, but their individual and especial interest was in the land, and in proportion as they were able to raise the price of corn, in the same proportion were their rent-rolls extended. The small amount of taxes paid by so small a portion of the community, bore no proportion to the increased revenue which they drew from the augmentation to the price of corn, thus verifying the wisdom of the fisherman, who gave "a sprat to catch a mackarel."

This was the state of the law for a long period. However preposterous it may now appear for a people to give a premium to a few of their number for *taking away from the remainder the means of subsistence*, yet the thing was done, and done largely. Even then it was so far understood, that our legislators, omnipotent as they considered themselves, did not choose to make such a law without giving a reason for it, and a very plausible one too. "The premium," said they, "will encourage cultivation at home, and render us independent of foreign supplies. In case of a bad crop, we shall always have a surplus, to make up any deficiency. It will prevent famine in the country." These good and benevolent men (!) had no sinister—no selfish object in view. The good of their country, and the supply of the wants of the poor, constituted all for which they were solicitous. It was a lucky coincidence only, that what should in their view prevent famine and starvation among the people, should also add largely to their own wealth.

Near the close of the last century, the war waged against France rendered Corn Laws of every description inoperative—nor were they wanted to suit the views of the landlords. During the whole duration of the war prices kept on rising, and rents advancing. In good seasons the price of wheat was seldom under 140s. per quarter, and, in bad seasons, above it. Landlords were in the hey-day of prosperity. The value of their property seemed to have no limit to its increase; but the war ceased, and prices fell immediately: the price of corn in particular. The landlords called out lustily for protection, and as the cry was made *to themselves by themselves* it was speedily attended to, and the law of 1815 was the result.

It would be wrong to attribute the rise that took place in corn during the war exclusively to the war itself. The depreciation of the currency, which took place during its continuance, had a con-

siderable influence; but even after allowing 30 per cent., which is nearly a third of the whole, for depreciation, still the price of corn was, in relation to the price in other countries, one half too high. It was at famine prices for years in England, and it was only the great amount of labour which the war threw into our hands that prevented the people from starving.

The law of 1815 fixed the price at which corn might be imported duty free at 84s. per quarter. Could we compare this price with the price of corn on the continent of Europe at the same time we should find the difference to be so great as to be scarcely credible, and there cannot be a doubt that it was fixed thus high for the purpose of prohibiting altogether the introduction of foreign corn. Though it did not exactly accomplish this, it had the effect of keeping prices very high. Notwithstanding these high prices, the extreme pressure of the Corn Laws was not immediately felt; nor is it yet fully understood. Great opposition was made at the time to the enactment of these laws; but without effect. All that could be obtained from our lawgivers was a reason for its enactment—a reason, somewhat different from the one formerly given in support of a premium being paid on the exportation of corn; but one equally honest, and equally benevolent. "We must," say they, "We must have this Corn Law, for without it the country cannot bear the amount of taxation entailed upon it by the expences of the war," obviously meaning that we the nobles, honourables, and right honourables, cannot afford to pay our share of the taxes, unless we can by some indirect measure draw the amount, and more than the amount which we pay, from the pockets of the industrious sons of labour.

It would be unnecessary to notice the absurdity of the reason given above were it not that this, in favour of the continuance of those laws in their present oppressive state is still repeated, and that by many, who have no interest in the existence of Corn Laws, but the reverse. Would not any man perceive the gross absurdity of our saying to a poor debtor, you owe us £10., but, because you are not able to bear the payment of this sum, you must pay us £20? And yet this is exactly the amount of the language used by an apologist for the Corn Laws, for these laws form only an additional quantum of taxation; but as they were never intended to put any thing into the public purse, their operation was designed to be completely disguised from the view of mankind.

Hitherto we have looked only at the enactment of the Corn Laws, and the reasons given by these authors for their enactment, and we have already arrived at the conclusion that the object for which they were enacted was to transfer a burden from the shoulders of the landholders to the shoulders of the industrious classes; or, to speak more correctly, it was to transmute a great evil to the country, incurred by the folly of the landholders, into a benefit for themselves, whatever might be the consequence to others. Grasping, avaricious, short-sighted mortals! This very act of injustice is big with retribution which no human arm can avert—

"Coming events cast their shadows before."

The very tone and temper of the Peers are prophetic of their fall, and it is the work of their own hands. The Proverbs say, "God usually blinds those whom he wishes to destroy." And when were men ever more blind, or more ignorant of all that it behoves them to know. The black darkness of Egypt is but a faint type of the double night by which their minds are involved.

But in order to see distinctly the object of these laws, we must know something of their operation. In the year 1820, when the price at which corn could be imported, duty free, was 84s. per quarter, Mr. M'Culloch, now Professor of Political Economy in the London University, calculated that the Corn Laws operated as a tax on the people of this country to the extent of twenty millions sterling annually! He is a landed proprietor himself, and his testimony is of some value. Since that time the law has been in some degree modified, and succeeding calculators have stated the extent of its operations, according to their views at fifteen millions sterling annually. Either the one or the other of these sums is sufficiently large for one portion of the people of this country to rob another portion of the people of, even under the sanction of the law, and ought not to be endured quietly for an hour; but we are prepared to show that these calculations are both below the mark, and that even under the modifications which the Corn Laws have undergone, they still operate as a tax to the extent of, or rather exceeding, twenty millions sterling.

Our statistical accounts and parliamentary papers are not at hand, and therefore we cannot be minute. The present state, however, of the corn markets at home and abroad furnish data, which we think will be sufficient for our present purpose. Before mentioning what the state of these markets is, we must notice that the quantity of wheat consumed annually in Great Britain is estimated at thirteen millions of quarters. Now the average price of wheat in Mark Lane is at present 42s. to 43s. per quarter. The price of the best wheat, free on board at Dantzic, is under 15s. per quarter, add to this sum for freight and charges 5s. per quarter, which is a large allowance, gives 20s. per quarter as the price of foreign wheat. The difference between 20s. and 43s. is 23s. Now thirteen millions of quarters of wheat at 23s. per quarter may be stated, in round numbers, at fifteen millions of pounds sterling, which the people of this country pay for their bread above what is paid on the Continent. They pay more, indeed, for they have the expence of transit in addition; but under the operation of these laws here is fifteen millions sterling paid on the article of wheat alone, exclusive of the additional price paid for oats, barley, and beans; which, according to our view, would raise the present amount of the tax to at least twenty millions annually, and let us again press it upon the attention of the reader, that not a fraction of this large sum finds its way into the public treasury. If it were a public tax there would be less objection to it, because it would displace an equal portion of other taxes, and would therefore press more equally on all.

To alter these laws, however, so as to make them produce

public revenue would not be any relief. Almost the whole benefit would continue in favour of the landholder. By several writers on this subject this point has been altogether overlooked. We notice particularly a pamphlet lately published, entitled, "England, Ireland, and America, by a Manchester Manufacturer." The writer of this pamphlet, which, in all other respects, is well deserving the attention of every man who regards the interest of his country, says (we quote from memory), that "we would not object to a tax on corn, for the purposes of revenue, more than to a tax on sugar or any other article." Now this is a statement which we hope the author will expunge in the next edition: for this reason, that a tax on any article that can be raised at home is very different from a tax levied on a foreign commodity, or rather on an article that cannot be produced at home. Every tax so levied is nothing else than a bonus to the producer of the article on which it is levied. Take for example the article of butter. The duty on butter is 22s. per cwt. What is the effect of this duty? Butter is sometimes imported from Holland, and it must be plain to the meanest capacity, that before any man will import butter *he must buy it abroad at more than 22s. per cwt. below the home price.* In fact, the price of butter in Holland is almost invariably 20s. per cwt. below the market price of butter in London; but the inhabitants of London are not permitted to buy the best article at the lowest price. And why? Because it would infringe on the special privileges of the landlords, so they are obliged to pay from 30 to 40 per cent. more than they would otherwise do for the article of butter, in order that the landlords may drink champagne and burgundy instead of those kitchen wines, port and sherry.

But this is not all, cheese, bacon, and fruit, are all placed in the same situation. An apple cannot be had from France without the payment of a heavy duty, and this duty cannot be taken off, lest a reduction of rent should be demanded on the orchards of Herefordshire and Kent.

Can any man now doubt of the object for which the Corn Laws were enacted? Is it not palpable, that the design was to increase the wealth of the rich at the expence of the poor? If they have failed in the former case, they have succeeded to a miracle in the latter. When was ever poverty so extensive and so general ever before seen in England?

We should now enquire into the effect which the Corn Laws have produced, and are still producing; but our limits admonish us that this must be the subject of a future Essay.

RELATIVE EXPENCES OF THE CLERGY IN DIFFERENT COUNTRIES.

The following Tables are well worthy of attention. To most they will be clear as the hand writing on the wall in regard to the duty of the people of this land: or rather in regard to those who hold the sublime declaration of the Author of Christianity, "My kingdom is not of this world."

Table I.

Expenditure on the Clergy of all the Christian World, except the Kingdoms of Great Britain, Wales, and Ireland.

Name of the Nation.	Number of Hearers.	Expenditure on the clergy per million of hearers.	Total amount of the Expenditure in each Nation.
France	30,000,000	£35,000	£1,050,000
United States	9,600,000	60,000	576,000
Spain	11,000,000	100,000	1,100,000
Portugal	3,000,000	100,000	300,000
Hungary, Catholics	4,000,000	80,000	320,000
Calvinists	1,000,000	60,000	63,000
Lutherans	650,000	40,000	26,000
Italy	19,391,000	40,000	776,000
Austria	18,918,000	50,000	950,000
Switzerland	1,720,000	50,000	87,000
Prussia	10,536,000	50,000	527,000
German Small States	12,763,000	60,000	765,000
Holland	2,000,000	80,000	160,000
Netherlands	6,000,000	42,000	252,000
Denmark	1,700,000	70,000	119,000
Sweden	3,400,000	70,000	238,000
Russia, Greek Church	34,000,000	15,000	510,000
Catholics and Lutherans	8,000,000	50,000	409,000
Christians in Turkey	6,000,000	30,000	180,000
South America	15,000,000	30,000	450,000
Christians dispersed elsewhere	3,000,000	50,000	150,000
The Clergy of	201,728,000	receive	£8,999,000

TABLE II.

Expenditure on the Clergy of the Established Church of England and Ireland.

NAME OF THE NATION.	Number of Hearers.	Expenditure on the clergy per million of hearers.	Total amount of the Expenditure in each Nation.
England and Wales .	6,500,000	£1,455,316	£9,459,565
Ireland	500,000	2,853,174	1,426,587

TABLE III.

Expenditure on the Clergy of the Established Church of Scotland.

Number of Hearers.	Expenditure on the clergy per million of hearers.	Total amount of the Expenditure.
1,500,000	£166,666	£250,000

DIGESTION. ESSAY II.—*The Fauces. Six openings therein. The Windpipe. The Epiglottis. Impropriety of talking when eating explained. Practical Remarks.*

THE second step in the process of Digestion is that of SWALLOWING OR DEGLUTITION.

The food, after being converted into a soft mass by the action of the teeth, tongue, saliva, is in the condition to be passed into the stomach.

The tube which conveys the food into the stomach is situated in the *back part* of the mouth, technically called the *fauces*. The tube itself is muscular, having two sets of fibres, *longitudinal*, which extend from the top of the tube to the bottom, and *circular*, which embrace in a beautifully radiated manner, the upper part of this tube. The tube is further lined with a mucous membrane, which secretes a mucus, that sheaths the inner surface of the tube.

The part, called the *fauces*, is that part in the back of the mouth, which is separated from that which is commonly called the mouth by the *curtain*, which can be seen on looking into any mouth. This curtain allows the food to pass in order to be

swallowed but acts, like a valve, preventing its return. Behind this curtain is the fauces; and into this cavity, thus called, there are *six* openings, the terminations of tubes going to different important organs. Thus, there are *two* tubes going to the ears, one on each side, conveying air into the *ears; two* to the *nostrils*, (hence it happens that when persons cough suddenly when the the food is in the fauces, the food escapes at the nostrils; it is forced through these tubes): *one* to the lungs, and *one* to the stomach.

The tube to the stomach, the œsophagus, that concerned in deglutition, is situated *behind* the tube that allows the air to be passed into the lungs. The food therefore must pass *over* this tube to get into the œsophagus; and to prevent the danger that might result from the food getting into this pipe, called the *windpipe*, the Creator has placed a valve on the top of the windpipe, called the *epiglottis*, which, directly any thing, either liquid or solid, passes into the fauces, shuts down and closes the entrance of the windpipe.

Besides these parts in the back part of the mouth, there are two glands called *tonsils*, which are situated as it were at the entrance to the fauces. They form the pillars of the curtain, dividing the fauces from the mouth. These often become diseased, constituting sore throat.

When the food has passed into the fauces, the *muscles*, attached to the *chin*, attached also to a *little bone* (which can be felt at the top of the throat, and seen very well at the root of a sheep's tongue, which bone is the commencement of the windpipe), raise up, by their contraction, this bone, pull it forwards, and thus greater room is allowed to the œsophagus to open so as to allow the passage of the food. This process can be observed by every one who pays attention to the phenomena of swallowing. The morsel having thus passed into the upper part of the œsophagus, called the *pharynx*, is seized hold of by the muscular contraction of the tube, and, by the mutual agency of the circular and longitudinal fibres, of which the tube is composed, is fixed down into the stomach.

There are two or three circumstances of interest connected with this subject worthy of notice. The *windpipe* that conveys the air into the lungs, is situated, as was stated, *before*, that is, *in front* of the gullet. This windpipe is made elastic, consisting of *cartilaginous* rings, which by their circular character, keep (which is essential to life) the passage for the air perpetually open. But this resisting hard tube would appear to impede a barrier in the way of the food passing down the gullet. Hence the necessity of that drawing forward and upward of the throat noticed already. However, animals cannot do this to the same extent as man, man being erect, their heads being prone. To obviate this difficulty in animals, the Creator has made the cartilages referred to, constituting the windpipe, to occupy of the windpipe about *two-thirds*: the third part completing the tube, namely, the part lying in contact with the gullet, being composed of *soft membrane*. This soft membrane opposes the barrier to the passage of the food.

Another circumstance here attracts the attention: namely, how unsafe is the practice of talking with the mouth full of food. Here fashion and nature agree; a rare thing. Since, in speaking, it is evident that the passage of the windpipe must be open, utterances being the modulations produced upon the air in its passage from the lungs through the windpipe. If a person speaks therefore when his mouth is full, it may happen, indeed it does often happen, that particles of the food may get into the windpipe, and produce the greatest irritation. Indeed, in some such cases, death has resulted. The person guilty of this rude and unwise practice deprives himself of the protection which the Creator has provided for him, and, consequently, receives the punishment.

Again, another lesson which we are taught, is to do all in our power to preserve the fauces in a healthy condition, because, as the passages to the ears are situated therein, and as hearing much depends upon the free ingress of the air, any alteration in those passages must be attended with inconvenient results. Indeed, how many persons ascribe their deafness to taking cold. They do not know in what way this taking cold acts; it often consists in the thickening or swollen condition of the membrane which surrounds the entrance of the tubes conveying air to the ears.

Another practical lesson we learn from the above statement is, that it is highly improper to feed infants with solid food; since, as swallowing is a muscular process, it must be evident, that, until the muscular powers of the child are increased, it cannot have the power to force the food into the stomach. Hence the food stops in the gullet: irritation arises, convulsions occur, and death is the result.

These statements will further enable us to explain another phenomenon, namely, the peculiar noise in the swallowing of persons that are dying. This noise arises in part from the loss of power in the muscles of deglutition, which loss renders it impossible that the liquid or solid particles of food can be taken hold of as they pass into the stomach. This, generally speaking, is a bad sign, because indicating that the powers of life are almost exhausted.

Another practical conclusion to be deduced from the description given is the necessity of chewing the food well: because it must be quite evident that the resistance to the passage of the food into the stomach must be much less when the food has been reduced to a softened condition, than when introduced into the gullet unchewed.

Such then are some of the phenomena connected with the process of deglutition: and such are some of the practical deductions to be derived from a knowledge of such phenomena.

In the next Number the next step in the process of Digestion will be considered, namely, the *conversion of food into chyme;* in considering which the stomach will be described.

CHRISTIANITY AND ITS INFLUENCE ON DOMESTIC LIFE.

Extract of a Letter from an Artist in the year 1835.

I AM convinced that many blessings which are promised to man, as effects of the doctrines of Christ, would be more generally and speedily realized in this life, if men would more frequently illustrate by example, in their own various dispositions, the image of the *lion lying down with the lamb:* for I cannot reconcile to any system of religious faith abstract speculations concerning individual spiritual advantages, interfering with or preventing men in this world from living harmoniously together. If our duty towards our neighbour is not interwoven with our duty towards our maker, I have mistaken altogether the principle of sound religion. Whether it be in accordance with the spirit of Christianity that any persons of singular tastes should indulge their feelings by withdrawing altogether from the society of their fellows, and enjoy uninterrupted communion with the Deity, neither receiving from nor imparting to their brethren aught of wisdom or of intellectual gratification, is a question quite apart from the consideration of the working of religious faith among communities of men; but to me it appears, I will not say as unnatural, but as irreligious, that faith should transform men into hermits, as that it should convert them into butchers of men. If it be said in answer to this appeal against the historical progress of Christianity, that it has seemed to be the purpose of the Almighty to spread the knowledge of his name by means of the vices of his enemies, and that peace and goodwill towards man were of necessity sown in blood, and that even the anchorite's example, though an extreme case, is of value as affording evidence of passive zeal, this does not affect the question, if viewed in relation to the political and domestic relations of a people living professedly under the same government and church. Here the doctrine of mutual forbearance surely cannot impede the advance of truth, nor can amiable conduct be at variance with the sentiments that teach us to love our neighbour as ourselves, and to do good to those that ill treat us. To talk of experiencing a state of mind that would endure martyrdom for the maintenance of an abstract sentiment, and yet to shrink from the daily endurance of wrong and pain, which duty imposes on us, is an inconsistency impossible in a true disciple of Jesus Christ. So gracefully does patient endurance sit upon the soul of a woman, that it would appear to the fancy, excited by such an appearance, that injustice was allowed to exist in the world in order to display this virtue with more effect, as a star glitters by aid of the dark atmosphere in which it lives. Surely there is something more commanding, more saint-like, more spiritual, in the aspect of a female, maintaining her sweetness and

composure, whilst walking by faith among the beating waves of the world, stilling the loud winds and commanding the turbulent waters of strife by the force of gentleness, than the abstraction of a nun, the selfish enjoyment of a recluse. If this is allowed to be a woman's duty, unconnected by any legal tie with her natural protector, how much more imperatively does such a duty fall upon the character of a wife.

CHURCH AND KING.

Even since sovereigns were allowed to have any voice in the election of ecclesiastical dignitaries, especially since the feudal system was introduced, when bishops became temporal barons, such bishops have, in all countries—we do not speak lightly—*been traitors to religion.* In a degree, far beyond temporal feudatories, have they proved themselves the instruments of the royal will, ready for any work, however base, however injurious to the interests of their country, of the church, of faith, and morals. Their superior suppleness is sufficiently explicable from their superior dependence on the favour of princes. They could not win lordships or honours by the sword; but they obtain them by flattery,—by a guilty condescension with kingly vices. A smooth tongue and a smiling brow are better than the sharpest weapons. If legislators were not generally as ignorant of history as they are of human nature, and if their honesty were not of a par with their knowledge, they would long since have found a place in the penal code for courtier bishops; they would have shut the palace of the King, and the ante-chamber of the Ministry, to every ecclesiastic. The more we read history, the more we perceive, that if science be progressive, wisdom is not; that men do not profit by the lessons of experience. Doubtless, because these lessons are not sufficiently consulted. Until ecclesiastics are wholly removed from the sphere of royal influence, *in no country will religion or morality flourish; in none will the church fulfil the purposes of its institution.*"—*Lardner's Cyclopædia.*

How to help the judgment of others.—In intercourse with others, it may sometimes be demanded by benevolence that their opinions should be corrected on points affecting their own happiness. In general, however, it becomes us rather to seek points of agreement than points of difference; but where points of difference are to be discussed, give the discussion the character of *a joint search after truth*—an inquiry by which both are to be benefited, rather than of contention for victory, or an exhibition of dogmatism. Knowledge communicated by benevolence has the united charm of intellect and virtue,—intellect engaged in clearing the ground of evil, and virtue engaged in covering it with good.—*Bentham's Deontology.*

ST. AUGUSTINE AND THE LORD OF THE MANOR.

The following legend may be seen in the public library of Oxford, bound up at the end of "The Life of Thomas à Becket," by John de Grandisono. The story is this:—

About the year A. D. 600, St. Augustine went to preach at Cometon in Oxfordshire. The priest of the place made a heavy complaint to the saint, that the lord of the manor, though often admonished by him, yet would pay him no tithes. Augustine questioned the lord about his default in devotion; but he stoutly answered, that the tenth sheaf was, doubtless, his that had interest in the nine, and therefore he would pay none. Presently Augustine declared him excommunicated, and turning to the altar to say mass, publicly forbade that any excommunicated person should be present; when, suddenly, a dead corpse, that had been buried at the church door, arose and departed out of the limits of the church-yard, standing still without while the mass continued. On its being ended, Augustine came up to this living-dead, and charged him, in the name of the Lord God, to declare who he was. He told the saint, that in the time of the British state, he was *hujus villæ patronus;* and although he had often been urged by the doctrine of the priest to pay his tithes, yet he never could be brought to it; for which he died, he says, excommunicated, and was carried to hell.* Augustine desired to know where the priest who excommunicated him was buried. This living-dead man shewed him the place, where the saint made an invocation of the dead priest, and bade him arise, because they wanted his help. The priest arose. Augustine asked him, if he knew the other who was risen: yes, replied the priest, and also expressed wishes that he had never known him; for, says he, he was in all things ever adverse to the church, a detainer of his tithes, and a great sinner to his death, and, therefore, I excommunicated him. Augustine then publicly declared that it was now proper that mercy should be used towards him, for that he had suffered long in hell for his offence; whereupon the saint gave him absolution, and sent him to his grave, where he again fell into dust and ashes. This *patronus* being departed, the newly risen priest told the saint that his corpse had lain in the grave above a hundred and seventy years. Augustine would gladly have had him continue upon earth again for the instruction of souls, but could not prevail upon him, so he also returned to his former lodging. The lord of the place standing by all this time, and trembling, was now demanded if he would pay his tithes, upon which he fell down at St. Augustine's feet, weeping and confessing his offence, and receiving pardon, became all his life-time a payer of tithes, and a follower of Augustine!—*A History of the Romish and English Hierarchies, by James Abbott, A. B. p.* 125.

* I should think the author meant purgatory.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

NOVEMBER 1, 1835.

OBEDIENCE AND HAPPINESS—DISOBEDIENCE AND MISERY.—HIDINGS OF GOD'S FACE.

In each of the preceding Numbers it has been attempted to demonstrate that there are certain laws appointed by the Creator for the regulation of the circumstances acting on man externally and internally: That these laws being attended to, man is rewarded by happiness: That these being unattended to, man is punished with misery. Illustrations were brought forward in the first Essay bearing upon man as a *physical* and an *organic* being: in the second Essay as a *moral* being.

In this Essay it will be attempted to establish the general truths, already stated, by removing some prejudices connected with the phrase—

"Hidings of God's Face;"

which prejudices have a tendency to lead individuals to doubt that happiness and misery are the results, in the one case, of obedience; in the other, of disobedience to the Creator's laws. These prejudices would lead to the belief, the progress-staying belief, that no such regularity, no such certainty of result, exists in the moral world.

One of the peculiar features of the human character is the power, possessed by the mind, of giving a locality to abstract states, and thus looking at them: which, without this localizing, the mind could never have contemplated. Thus the human being could not contemplate the Deity in his abstract character. The attempt would dumbfound the intellect; and so it happens that the individual, who wishes to think of God, immediately clothes him in all the characteristics of the materiality of a man. The divine spirit of inspiration has authorized this, and we read in the holy writings of God's arm, of his neck clothed with thunder, of his eyes being in every place. Even the positions of the body are ascribed to God; thus, he is said to stand, to walk, and to sit on the clouds of heaven; evidently referring to certain modes in which our material parts manifest themselves. Now, no one supposes that these phrases are literally true, as applied to the Deity, but the phrases are permitted to us, because, from the peculiar nature (not weakness, as it is commonly said,) of our faculties,

we are unable in our present state to conceive of God without. But, although we are permitted to use these expressions, we ought to be particularly guarded, lest we obtain a habit from the use of them, of imagining that the Deity is influenced by those feelings which, in this state, so disfigure our mental condition. It is from neglecting this, that many clergymen represent God as a vindictive being; as a being that trifles with the feelings of his creatures. This mistake is, perhaps, in no way more strikingly exhibited than in the common phrase, "*The hidings of God's face.*" We are generally taught that God, with the view of trying his people, actually withdraws himself from them, and leaves them in a state of spiritual destitution; that he is like a foolish lady, who acts the coquette, in order to ascertain whether the lover loves, by the grief he displays at her apparent want of affection. This is a very common creed, and shows a most lamentable ignorance. How often do we hear good, pious people complain of the hidings of God's face, in the sense that God has himself actually hidden his face. There can be no dispute as to the point that God's face is hidden, but not by God; it is hidden *by the state of the mind* existing previous to such perception of the hidden countenance of God; and for this very simple reason, that the state of mind is one opposed to that law which requires, that the love of excellence, which is God, and of his law, the manifestation of excellence, should be supreme. The mind is in a state of loving some vice, and this love is opposed to the love of excellence. The mind, therefore, cannot have the pleasure arising from the love of excellence, and the pleasure arising from sin: "Ye cannot serve God and Mammon." It feels a vacuum, and this vacuum its possessor ignorantly ascribes to God's hiding his face; and the unpleasantness of this state will be perceived with an intensity, proportioned in most times, to the elevated condition of the mind thus cast down. So far from God's hiding his face, we are the parties that hide. The term face is expressive; the face is the outlet for the expression of our feelings; and, therefore, when we hide our face in reference to God, it is to be understood that we prevent the mind from exercising itself in those channels which are accordant with God's will; and, as the purest, the most satisfactory pleasures, are connected with the activity of the mind in these channels, it is quite evident that happiness cannot be ours if we direct the mind into other channels. Job asked, "Wherefore hidest thou thy face, and holdest me for thine enemy." Chap. xiii. 24. But, it must be remembered that this question was before God had opened his eyes; for, as the true friend of Job remarked regarding God, "He withdraweth not his eyes from the righteous." Chap. xxxvi. 7. The Psalmist often asks of God, Why he hideth his face? But it will be found that there is some state of mind which occasions the face of God to be hidden; that it is not an act on the part of God, but it is a result arising from the individual's mind being in a state contrary to the will of God. God is said to be the God that hideth his face from the House of Jacob. Isaiah viii. 17. But the reason is given elsewhere. In chapter lix.

the prophet states the cause: he had been describing the strict adherence of the Israelites to the ceremonial law, while, at the same time, they committed abominable violations of the law of justice and of mercy; and he adds, verse 2, "Your iniquities have separated between you and your God, and your sins have hid his face from you." But it may be urged, that amongst the promises of God to his people, one is, "Neither will I hide my face any more from them." It is so stated in Ezekiel, chap. xxxix. 29. But then let us behold this truth as stated in connexion, and it will be found that the prophet had been previously describing the deliverance of the Israelites from their enemies; and then adds, "I am sanctified in them in the sight of many nations: then they shall know that I am the Lord their God." This knowledge is connected with the change of that state of mind which was opposed to the will of God, and which prevented their seeing God's face. And to illustrate this more fully, the prophet adds, as connected with the promise, verse 29, "for I have poured out my spirit upon the house of Israel." That is, he had communicated that influence, which, as it were, in opposition to themselves, delivered them from the evil states of mind, and thus enabled them to behold God's face. Indeed, the more this subject is investigated, the more will it be found that *we* are the *hiders;* and that almost all the troubles of man arise from his refusal to look at God's face; not from the circumstance that God's face is not to be seen, but because man will not look at it. It is always well to remember, that God's face is to be seen in the volume of Creation and of Revelation. In both these man must seek to discover his features; and he will find that the more he searches, the more will he discover that enlightened benignity clothes his brow, and smiles of joy irradiate his countenance. In conclusion, the more the face of the Deity is read, the more will the principle, which will influence most of the illustrations brought forward in this Magazine, shine forth, namely, that Obedience and Happiness, Disobedience and Misery, are essentially allied.

It would not be proper to conclude this Essay without noticing the fact, that the most virtuous, the most exalted in devotional feeling, are those who experience most intensely, and most frequently, these miscalled hidings of God's face. The reason is apparent. The more developed and the more active a man's moral and religious feelings are, the more will he feel the want, arising from the activity of these highly developed feelings being prevented. Hence this language respecting the hidings of God's face is not to be ridiculed: but it is the duty of every enlightened individual to endeavour to open up to these distressed ones, the real cause of the misery they suffer.

PARTICULAR PROVIDENCE, HOW COMPATIBLE WITH THE FIXEDNESS OF THE LAWS OF NATURE.

To the Editor of the Anthropological Magazine.

Sir—As a sincere enquirer after truth, I take a deep interest in your favourite science, phrenology; this unfolding just views of human nature, and thereby tending to promote the best interests of man. An objection which often is urged against phrenology is, that it tends to necessity or fatalism. Not competent to refute this objection, yet believing it to be unfounded, I respectfully solicit your attention to the subject, that you may give such answer as will satisfy the unprejudiced mind; and I take this opportunity of suggesting that it is of vast importance to give such illustrations of the science as will prove in harmony with divine revelation, and give no occasion of offence or hesitation to the genuine Christian.

The doctrine of a particular providence is much insisted on in Scripture, and is the foundation of much of the peace and consolation of all true christians; yet phrenologists have written too much as if we lived and acted under a system of physical necessity, which, if admitted, destroys the accountability of man. That the laws of Nature are fixed is an important truth. Our Lord seems to have sanctioned confidence in their fixedness, when he refused to cast himself down from the pinnacle of the Temple; that is, to violate the physical law, although it was written that the angels had charge over him, lest he should dash his foot against a stone. And in the case noticed it would have been, it is likely, a presumptuous appeal to God, without any necessity, for a suspension of the laws of physical nature. On the other hand, the confidence referred to is liable to objection, if we assert that the laws of Nature are so invariable, that in no case are we to expect the usual course of things to be interrupted. The 107th Psalm is full of the sweetest consolation to all humble penitent sinners; that, when they return from their evil ways unto God, he will not only pardon their iniquities, but avert from them the physical consequences of their errors, which otherwise they must have suffered. "Fools because of their sins are afflicted, they draw near to the gates of death, then they cry to the Lord in their trouble, and he delivereth them out of their distresses."*

* It is true God delivers the fools out of their distresses, but God does not deliver them from the *consequences* of those misconducts, those violations of law, which brought those distresses upon them. A man may have committed some crime punishable with death. The king may pardon: but the crime is still a crime. A man may, it is true, be pardoned for his sins, but that does not restore the state of *purity of mind* which existed before these sins were committed. A man may be sorry when he has brought on, by excessive drinking, a permanent *hardening of his liver*, and he may determine to leave off his excesses; but this cessation does not remove the hardened, the diseased state of his liver. Hence it is that wicked men, who have been made believers in Christianity, and who have by that belief been led to see the enormity of their vices, find that the state of mind, connected with the perseverance in those vices, remains with them, and is their constant torment. It is the old man, as it is elsewhere called.—Editor.

Much of this providential administration is doubtless effected through the instrumentality of spiritual intelligences, who are sent forth to be ministering spirits to them who shall be heirs of salvation. Their agency is unseen, and is not to be taken into our calculations in estimating physical power; which, though directing and controlling to a certain extent, they may not be able actually to suspend, though it may appear to us that the laws of physical nature are suspended. The retarding or the accelerating our motion may cause a conjunction of circumstances productive of the most eventful consequences. Battles have been often lost or won by such means, and some of the greatest conquerors have acknowledged, that their most splendid victories were dependent on apparently accidental combinations, totally beyond their foresight. Such being the case, it becomes us to cultivate a constant faith in the existence of God, the Universal Spirit, and in the existence of an invisible agency of subordinate spiritual intelligences, because man is not left altogether to himself either for good or for evil. The Devil, we are told, goeth about as a roaring lion seeking whom he may devour; and he is prevented from devouring us all, only by the restraint of a power superior to his own.

Nor is it in our external circumstances alone that we are subject to unseen influences. There resides within us also a spiritual power, which governs all our physical organs. Phrenology professes to ascertain the organs by which mind is manifested, and to prove that without suitable organs we cannot expect the manifestations of mind. These organs of the mind however are mere instruments, as much as the hand, or foot, or eye; which may all be well or ill-directed according to the controlling or spiritual power which is in us. One man may have a stronger arm or leg, and consequently may do more work than another who has weaker limbs—also, one man may have more veneration or conscientiousness, and consequently be more alive to the reverence due to God and his superiors, or to the dictates of justice, than another who has these organs less fully developed: yet we ought not to confound the limb or organ, which is visible, with the spirit or directing power, which is invisible; this latter principle we ought to believe has as real an existence, as the physical bodies that surround it, and are subject to it.

This invisible part of human nature is essential to it. Our bodies without a union to it are mere lumps of clay; whatever physical powers he possesses, man possesses a soul, or spirit capable of volition, and he is accountable because he possesses in some degree every necessary organ for its proper manifestation. Phrenologists too often speak as if there were in some cases such deficiency of moral powers or organs, as to subject men to a physical necessity of yielding themselves up to the lower faculties. This is the view by which many Christians are alarmed. But faith in the existence of spiritual intelligences is essential to the well-being of man, and phrenologists will do much harm if they accustom men to forget this truth. Faith, Dr. Dwight (Sermon 65th) says, is a voluntary act. Its object

is pre-eminently God, and his moral character—when this is understood in some measure, it is an object of approbation or of aversion, according to the state of our minds. Truth is the foundation of all good. Faith is the commencement of virtue in man.*

These superficial ideas I have thrown out in hopes that you will take up the subject, and do it more justice than I am capable of doing.

I am your's, most respectfully,

LIBRA.

MORAL LAW AND *THE* MORAL LAW.

To the Editor of the Anthropological Magazine.

Sir—I have derived considerable instruction from your periodical, and beg to acknowledge the same, and shall assist as far as I can in the circulation of it.

In reading over the first article in this month's number, the following reflections presented themselves: by which it will be understood, that what you said of the moral law was, to me, neither intelligible or convincing.

Moral law† is not universal and fixed, but local and changeable; for the moral law of one portion of mankind is different from that of another.

The moral law of the Hindoos, which sanctions public self-murder, is not the moral law of the Europeans. The greatest part of the wholesale enormities, at which we shudder, were sanctioned by the moral law of the people perpetrating them.

Moral law is not only local but temporary. The moral law of Europe at this time is not its moral law of the time of the crusades. The moral law of the catholics and protestants, which sanctioned mutual extirpation, is not their moral law at this time.

Moral law is not only local and temporary, but personal. The moral law which forbids swearing and fighting to the quaker, is not the moral law of other sects. Further—the moral law by which you and I are guided, may cease to guide us in after life.

Conscience is pointed at as the expositor of the moral law. So it is individually, but not universally. My conscience is the expositor of my moral law, the quaker's of his, the protestant's of his, the catholic's of his, the hindoo's of his. But neither my con-

---

* The influence of faith will be examined in a following Number in reference to phrenological principles. Till the opportunity for this examination occurs, arguments on the bearings of this important matter on phrenology must be postponed. All that we have to state at present, is that every act that we do, even when we dress ourselves, breakfast, eat our dinners, or undress when we retire at night, is from faith.—Editor.

† Perhaps "moral law" is defined correctly as *local, temporary, personal.* That these appellatives cannot be applied to "*the* moral law," an attempt will be made to show in a succeeding number.—Editor.

science, nor the quaker's, nor the protestant's, nor the catholic's, nor the hindoo's, can be the expositor of the moral law by which you are guided.

It therefore appears to me that the hypothesis, that there is one certain law for the moral guidance of the human race, is a fallacy. It cannot be demonstrated that such a law ever did exist, or does now exist; and it cannot even be surmised that it ever will exist.* The moral code of a nation depends on the physical constitution, mainly, of the people; this is affected by climate, soil, and innumerable other circumstances.

Apologizing for this long intrusion,

I remain your's respectfully,

J. D., a Subscriber.

After all, I cannot refrain from adding my further thought upon this subject. I believe that the moral law of a man, or of a portion of mankind, depends entirely on his or its intellectual and physical condition. If the physical and intellectual condition are perfect, then the morality will be perfect, and *vice versa*. To promote the which condition all the efforts of philosophers and public teachers should be directed. To preach morality to any whose intellectual and physical condition is, as mankind's now is, I think, an act of fatuity. But intellectual and physical good will be attended *pari passu* with moral good. It is a trinity in unity—physical good is the Father, intellectual good the Spirit, and moral good the Son.

J. D.

CORN LAWS—ILLUSTRATIONS OF THE ABOMINATION OF

A FRIEND at Kirkaldy mentioned the following facts as connected with the laws excluding the produce of other countries from Great Britain. It is a custom at Leith, when Dutch butter that cannot be sold for man's consumption, is put up for auction for greasing sheep and other like purposes, that the custom-house officer bores a deep hole with a red-hot iron and then pours melted tar down into the hole in order to spoil it for human consumption.

The same friend mentioned another fact, that a great quantity of bonded corn is yearly thrown into the sea from the following circumstance. The corn on being kept is liable to get dusty and to suffer in other ways; and they have frequently to sift it and make it undergo other processes which occasion a great loss. These siftings are put into bags, and when the tide is out a custom-house officer goes down with the carts to the sea, and sees that this food, at least for horses, is thrown into the waves.

---

* In a succeeding number an attempt will be made to establish, on *phrenological data*, the erroneousness of the opinion, that no such universal moral law ever did exist, or ever will exist. But we must get a little more advanced in the principles of phrenology before investigating these abstract, but important, subjects.—EDITOR.

PHRENOLOGY, BY JOHN EPPS, M.D.

Essay III.

Having examined fully in the preceding Essays *two* of the principles upon which phrenology is based, namely, That the brain is the organ of the mind; and, That different parts of the brain have different duties connected with them, the third principle, *That the size of these parts, other things being equal* (cœteris paribus), *is an index of the power of the faculties with these parts connected*, may now be brought under consideration.

That size generally is an index of power most will allow. When we contrast the delicately moulded arm of a female with the massive, robust, muscularly marked arm of a smith, working on his anvil, acknowledgments felt and perhaps expressed, "How delicate," "how strong," almost instinctively arise in the mind. The reason is clear; size is considered as an index of power; of which truth numerous illustrations will at once occur to the mind.

It is true that *intensity* of action does not always accompany *power*. Many machines exhibit power of action that do not exhibit intensity: and many exhibit intensity of action that do not exhibit a relative amount of power. This, indeed, is often observed in reference to men's minds, in connexion with their head. How often is it objected to phrenology that men with *small heads* are very talented, shrewd, clever, active, and enterprising. These characteristics of talent, shrewdness, cleverness, activity, are attributes or rather exhibitions of *intensity* of action rather than of *power:* and small heads as well as small machines, which cannot exhibit power, can exhibit intensity of action. Here is the mistake: the confounding power with intensity.

That size, in reference to the head, is an index of power will be rendered more clear, if it be remembered, that the head is divisible into three compartments; the organs of the animal feelings situated behind and marked dark in the phrenological sketch in Number I.; the organs of the moral and religious feelings situated above and marked light in the same sketch, and the organs of the intellectual powers situated in the front of the head. It is evident that a man may have a large head, but it may be large, not from the organs of the intellect or of the moral feelings, but from the organs of the animal feelings: and the opposite. *Absolute* size will not therefore be a sufficient guide: *relative* size must be taken into consideration.

But size is allowed to be an index of power by all. Let any look at the drawing of the idiot, *p.* 36, and contrast it with that of Benjamin Franklin, will not he come to the conclusion, that the one is an idiot and the other an intellectual being of the highest order. Whence this conclusion but from the circumstance that the concluder has perceived large size of the forehead and intel-

lectual power, deficient size of the forehead and idiocy to be coincident circumstances? So, in reference to the other divisions of the head, mankind generally have agreed that a particular shaped head "looks bad." Now this looking bad is, (there can be but little doubt) connected with the observation, which the observer in making never thought of noticing particularly, that wicked individuals and degraded characters have a particularly formed head: large in the back part and along the lower part of the sides of the head: and having this impressed upon the mind whenever he beholds a similarly shaped head, observes, "that's a bad-looking fellow."

And here it may be proper to notice a common observation, "I believe in physiognomy; I think that the *face* expresses a great deal of the character: but I cannot believe in the head expressing character." Such an objector forgets that the head and its size and its shape are most important constituents in the features; and that a most pleasing face, having put upon it an idiotic forehead, or a head very large behind and on the sides, will look quite different, and will lose most of its beauty: so much does the head affect the face. Indeed the head is the grand active power in producing the physiognomy; and this is now beginning to be most beneficially appreciated by artists.

Having thus removed some of the difficulties, which, in some minds, have acted as impediments to the perception of the full value of this third principle, that size is an index of power, some positive facts illustrative of the principle may now be brought forward.

The first individual is Joseph Hume. The head of this extraordinary man is very large. It is enormous in the organ of firmness and large in the organ of self-esteem. He has full combativeness. His perceptive powers are large, and his reflective faculties are such as quite to falsify the hacknied newspaper dogma, that he has not comprehensiveness of mind.* The parliamentary career of Joseph Hume is known to most. When he first went into Parliament he stood alone as the advocate of retrenchment and economy.† He rose in his seat hour after hour when the Estimates were being voted. The Members of the House coughed, hear-ed, hear-ed, talked, made peculiar sounds, and even snored in order to put him down. All was in vain. All information was as far as possible kept back from him. The public accounts were drawn up in so mysterious a manner, that it was almost impossible to unravel the

---

* It is true that the Member for Middlesex does sometimes make mistakes when reasoning upon general principles. But these mistakes occur generally from the great activity of the perceptive powers, which so load him with details that he cannot get freed so as to embrace clearly the general principle. This is often the case with men who have the perceptive faculties large.

† By asserting that he stood alone it is not intended to convey the idea that none besides Mr. Hume advocated retrenchment and economy. But what is meant is, that, while others called loudly for retrenchment, he showed by laborious investigations the excessive extravagance, the disgraceful trafficking, prevailing in almost all the public departments.

labyrinth of complications thus produced. Still Joseph Hume persevered. Neither coaxing nor insult nor opposition could arrest him in his career. And what has been the consequence. Let any one go to the House of Commons,* and on the Estimate nights, he will find a talented individual (with a head too small for his situation, although it has of late years become larger, and will, if the party be industrious, get much larger still), namely, Mr. Spring Rice; who, whenever he moves that His Majesty be empowered to grant, &c. &c., casts his eye at the Member for Middlesex, as much as to say, "Economic Hume do you oppose this: if not, it is all right:" and if Mr. Hume does not rise the Ayes are sure to carry the vote without difficulty. Go any other night and observe the fact, that whenever Mr. Hume rises to speak, he is attended to with respect. Now, how has this been brought about? Are we to suppose that there are not many Members, who would like to have encountered the storm and to have the honour of being victors after many years buffetting the waves? Are we to suppose that there are not many in the House of Commons, who have as earnestly as Mr. Hume wished for retrenchment and every good thing. Why then have they not come forward? Or if they have come forward, why have they not persevered? The answer is simple; they have not *size of head.* Joseph Hume has a large head, and he has persevered and has gained the victory.

There is another individual in the House of Commons, whose career is well known. He is the Atlas of Ireland—Mr. O'Connell. Look at his enormous head. Are not there hundreds who would delight in being called the Liberators of Ireland? Are not there many men who would have been delighted by the capability of begetting by the mighty throes of their intellect that stupendous moral giant that exhibited a moral force, which, even now, when we contemplate the majestic greatness of its achievements, makes us feel proud that we are men. Such was the Catholic Association?† Are not there many men who would be delighted to direct the minds of millions to the attainment of a specific object? Why then have they not done it? Because they could not. Why has Daniel O'Connell? Because he has a head, which, by its size, is capable of taking into its grasp all the circumstances essential to forming a gigantic plan; is capable of arranging all the means necessary to give that plan full effect: and has power to bear up under the disappointments, the opposition, the contumely, which, in the prosecution of this plan, he must necessarily meet with.

Men wonder at this extraordinary man. If they looked at his head and add to it the education that that head has received, they would not wonder. They would see the cause of his capabilities: and they would behold him as an instrument, which the Creator has raised for the purpose of effecting the deliverance of a nation

---

* Mr. Hume has now changed his place. He used always to sit beside a pillar on the left of the chair.

† For a most vivid, accurate, soul exciting account of the origin and progress and effects of this Association, read *Tait's Magazine.*

from oppressions of the most cruel kind, namely, oppressions *regarding the conscience:* oppressions, founded on a principle, (quite opposed to the will of the Creator, as recorded in the fact, that hardly any two heads are alike,) namely, that *one head has a right to legislate for the creeds of other heads.*

And here it may be advantageous again to notice the difference between *activity* and *power*, as connected with the career and the organization of another Member of Parliament. There is an individual, who has been long noted for his brilliancy of thought, his acuteness of expression, his fixation of opponents, his readiness at catching the weak point in an opposing argument, the skill manifested in his antitheses, but who has, compared to O'Connell, a small head. Need Mr. Sheil's name be recorded? Here is activity of brain; but there is not power like O'Connell. O'Connell is like the discharge of a battery, that sweeps away a rank; Sheil is like the sharp-shooter that brings down some straggling or rash officer: O'Connell is like the burst of a volcano; Sheil is like the forked lightning that pierces through the clothing of sophistry, and inflicts political death. Behind O'Connell's most tremendous outbursts of cloudy indignation and withering sarcasm, there is a sunshine of humanity that gilds even the horror, like the sun setting in a horizon skirted by a stormy sky.

The Essayist has often been struck at the power of Mr. O'Connell in his replies to and attacks upon that fiery, honest but miseducated lordling, Mr. Stanley. When Mr. Stanley was a Minister, cheered on by the Ministerial benches, he, like a sharp terrier, snarled and bit at the great mastiff. The great dog, although surrounded by a number of whelping curs in full howl against him, knowing also that the brave mastiffs without, who if they know of his courage would help him, would not hear of his encounter (O'Connell had denounced the *Times*), turned his tail upon the terrier, and looking sideways and backwards cast upon the snarler a scowl that kept him at bay; or, if he did venture to bite he was seized by the neck and shook so unmercifully, that it was necessary that another cur should get up to state that the terrier would not do so again.

The Essayist has further been pleased to find that Mr. Sheil has had the good sense to fight under the banners of Mr. O'Connell. Many have taunted him with this. But it is wise. The large head before the small head must ever be the rule: that is, if the large head has been educated as well as the small one.

It is interesting further to notice the fact that men that have led in revolutions have had large heads: look at the large head of Cromwell, of Bonaparte, of Washington. Many others might be named.

But there are other revolutionists besides those of the sword. There are silent revolutionists that use *mind* as their weapon. These men have large heads. Look at the splendid development of a Jeremy Bentham, of a Franklin, of a Gall, and of a Spurzheim.

There was an instance of a large head that once it used to be

delightful to contemplate, as a splendid illustration of size connected with power. It was that of a man, whose grasp of mind enabled him to comprehend in the bounds of his intellectual vision the splendours and the vastnesses of the worlds in the wide regions of space, and, bringing these splendours and these vastnesses down to the earth, manufactured them by the cunning of his intellectual hands into a building of evidences,* establishing that the God of Nature and the God of Revelation is one and the same. And not only did he make the building but he ornamented it with the splendid clothing which his immense development of ideality enabled him to impart, rendering the building worthy of the truths which inhabited it. It was delightful to contemplate this mind, and it was that of Dr. Chalmers. But now the contrast is distressing. That very mind that once soared so nobly; that once poured forth bursts of eloquence, that perhaps were never surpassed, in behalf of Catholic emancipation, is now dwelling amongst the dens of bigotry, and is labouring hard to invest the dark places of horrid cruelty with the character of devotional beauty. That mind, that once felt the freedom of heaven, is now labouring hard to strengthen itself with the chains of hell, by attempting to impede the progress of that heavenly truth, "My kingdom is not of this world," by perpetuating a despotism over conscience.

Size is an index of power, that is where health exists. In many cases, such as in affections of the head, the head becomes very large: but this largeness is the result of disease: and no phrenologist ever thinks of judging from such cases. Many diseases affect the bones of the head, so as to make them enlarge. From such largeness there is nothing respecting power to be deduced.

Having thus illustrated the third principle upon which phrenology is based, the fourth principle, *That the form of the head corresponds to the form of the brain*, can now be beneficially examined.

It is quite evident that the perception of the truths of phrenology might take place without the knowledge that a brain exists. A person might know that certain developments of the head indicate certain dispositional tendencies or certain intellectual powers, without being aware that these developments are connected with a development of the parts of the brain situated beneath. Still, this would be only an empirical knowledge: though it would be knowledge. The phrenologist seeks a scientific knowledge: that is a knowledge which embraces the *cause why* certain parts of the head are developed in certain individuals. He therefore penetrates to the brain, and believes that to be the organ of the mind, and that different parts of the brain have certain duties connected with them; he inquires how it happens that the soft brain gives form to the hard skull.

To understand this it may be advantageous to give a short

* See Dr. Chalmers' Lectures on Astronomy.

account of the skull, of its structure and formation. The skull, as it is presented to us in adult age, exhibits a hard hollow bony covering, having a large cavity within. It seems to be one solid mass without division. On more minute examination, however, we find it to exhibit peculiar waved lines on its surface, which indicate the position of points where the bones of the skull (for the skull consists of bones) are joined together, these joinings being called sutures. The following bones form the skull, namely, the frontal, forming the forehead; the parietal, forming the crown of the head and part of the sides; the temporal, forming the lower parts of the sides of the head: the occipital, forming the back part of the head, and with the sphenoid and the ethnoid, forming the base. Now these bones in infancy and in youth, and in the earlier periods of manhood, are separate one from another. They unite by the joinings already named, called *sutures*: and thus one difficulty, standing in the way of the belief, that the brain can give form to the skull, is removed: because this difficulty consisted in the idea, that as the skull is composed of one bone, it is impossible that the skull could receive form from the brain.

The difficulty of conceiving that the hard body, the skull, receives form from the soft body, the brain, is diminished when the mode of formation of these separate bones is considered. Thus all these bones, in their first state, are nothing but *soft membranes*, approaching in its characters to *gristle*, technically called *cartilage*. This membrane is gradually converted into bone, by the deposit of bony matter from the extremities of small arteries, which branch through this membrane. Particle of bone is placed down after particle, and thus, in process of time, the whole of this membrane, which lies upon the brain, is converted into bone. It will be perceived from this statement that it is a gradual work: that the bone is not formed all at once: and that this gradual formation allows the soft brain to give form to the hard skull.

Another circumstance worthy of notice is that the brain is in *continual motion*. It continually pulsates: and by this continual pulsation it is enabled to act upon the body against which it pulsates. To understand the power of a pulsating soft body upon a fixed hard body, reference may be made to the power of a tender blade of corn forcing its way, in the spring of the year, through hard, even trodden-down soil: a blade, so tender, that even the most gentle force, applied sideways, would destroy it, and yet such is its power from beneath, that it forces its way through the superimposed earth. Again, it not unfrequently happens in the human body, that an enlargement of one of the great blood vessels takes place; and if this enlargement, called an *aneurism*, lies near a bone, it, by its continual pulsation, acts upon the bone, and in many cases, as it were, eats its way through the bone, so as to divide the bone into two parts. Now, here is a soft body acting upon a hard. Can it be difficult to conceive that the brain, (thus continually pulsating, and acting upon a variety of bones, these bones themselves gradually formed by the deposit of bony matter, and, in addition, continually absorbed, and continually renewed by

the deposit of fresh matter supplying the place of the old matter absorbed,) gives form to the skull, which has nothing except the brain to be deposited upon?

Much has been written respecting what are called *tables of the skull;* and that the inequality in thickness of these two tables prevents the brain giving form to the skull. Any one, however, who will take the trouble to examine these tables, as they are miscalled, will find that they lie one upon the other like two leaves of this book lie: and, consequently, any rounded or other form pressing upwards from beneath must, if pressing upwards the under leaf, press upwards the upper leaf lying in contact with the under leaf. Let any one put his finger under two of the leaves of this book, and see the result on both leaves. Transfer this to the brain and the two tables of the skull.

Another difficulty is the *frontal sinus.* This is a cavity, produced by the two tables just noticed, separating one from the other, and forming a cavity at the lower part of the forehead, immediately above the root of the nose. This cavity sometimes extends along the ridge forming the eyebrows about midway. Generally, however, the development of brain may be distinguished from the largeness produced by this sinus, by the rounded character of the former, and the ridgy character of the latter.

The phrenologist being aware of the difficulties with which he has to contend, (and what science is without difficulties?) meets these difficulties with pleasure; and overcomes them.

Among these, one most commonly urged is, the difficulty of observing differences in the forms of heads. A like difficulty prevails in all branches of trade and manufacture. If you visit a wool-stapler, and present to him a variety of wools, which to an inexperienced eye are so similar, that no difference is discoverable between them, the wool-stapler will not only discover the differences, but will tell the country which the sheep inhabited from whose back the wool was removed: and so exact is he in his knowledge, that he buys in accordance therewith, and realizes, benefit. So, in other trades: a tact is gained by practice, or what is called experience (practice long continued), which, without practice cannot be gained: and the inexperienced in wool would be as little justified in despising the assertion of a wool-stapler that he can judge of the differences of wool, as is the inexperienced in phrenological observations in denying the possibility of distinguishing differences in human heads.

Having thus endeavoured to establish *That the brain is the organ of the mind; That the different parts of the brain have different duties connected with them; That the size of these parts*, cœteris paribus, *is an index of the power of the faculties therewith connected;* and, *That the external form of the head is an index of the form of the brain*, this Essay may be appropriately concluded.

In the last Essay, No. 3 is stated to be Oberlin and 4 the murderer: whereas 3 is the murderer and 4 is Oberlin.

THE INJUSTICE AND THE IMPOLICY OF FREEING ANY CLASS OF SOCIETY FROM ITS SHARE IN PROVIDING FOR THE WANTS OF THE STATE, MORE PARTICULARLY THE CLERICAL.

TO THE LEGISLATURE OF THE STATE OF NEW YORK.

The Memorial of the subscribers, inhabitants, tax payers, and electors of the said State,

Respectfully represents,

That they hold it to be an incontrovertible axiom, applicable as well to *morals* as to *politics*, that the radical object of political government is to protect, by *equal laws*, the *equal rights* of all and each of the members of the civil compact. "*Unequal laws*, therefore, are *acts* of *injustice*," and all laws are of that character, the object or operation of which exempts a portion of the community from burdens which are imposed on others for the general benefit. And it is equally true, that any laws by which a part of the constituents of government, in consideration of their religious *profession* or *character*, are partially favored in the general assessment, or privileged from the payment of any of the public taxes, while others are thereby subjected to increased and unequal impositions, or obliged exclusively to bear the public burthens, are emphatically *acts of spiritual oppression*—a combination of political and ecclesiastical concernments—a violation of the holy principles of equal rights and equal justice, and a perversion of the primary objects of civil government.

Such, in the estimation of your Memorialists, is the character of that portion of the "*Revised laws*" of this State, by virtue of which the property of the *Clergy* and of religious societies, companies, and corporations, is either partially taxed, or totally exempted from participating in the expence necessary to the support of the government, by which such persons and such property are intended, in common with all *other*, to be protected.

The law in question is not only out of harmony with the spirit and the object of the free political institutions of this State, but it is a palpable infraction of those provisions of the constitution which were intended to guard as well the rights and liberties of those who do *not* as of those who *do* profess religion, or follow it as a *profession*.

The object of government being to protect the persons and the property of its constituents, *justice* demands that they should be *equally* and efficiently protected. If *persons* and *property* are the proper items or objects of taxation; and doubtless they are so, inasmuch as they are bound in justice and by the laws of self-preservation, to contribute *equally in proportion to their ability* to

the means necessary for their own protection; no *person* should be *partially favored* in the general assessment, nor *specially privileged* on account of their *religious profession* from bearing a due portion of the public expence: nor should any *property* be exempted from the general contribution, in consideration of the *religious profession* of its owner; or because he may choose to devote it to the use of the church, or employ it for the purpose of propagating his own religious creeds or opinions. Equally unjust is it, that any person or any portion of the community should be obliged to bear exclusively the public burthens, or an unequal portion of them; because they may happen *not* to think it necessary or useful to devote themselves or their property to religious purposes.

Many of your Memorialists have heretofore unsuccessfully endeavoured to draw the attention of the legislature to this subject; and they are now more particularly solicitous to obtain for it that consideration to which its great importance justly entitles it. The *unpledged* revenues of the State, being found inadequate to the exigencies of the government, the Executive deemed it advisable to recommend to the legislature at the last session, and will probably again propose for their deliberation, the laying of a *direct tax* to supply the deficiency of the general fund. The present time, therefore, is not only proper, but peculiarly propitious, to the removal of the evil which constitutes the present subject of complaint; and, while again presenting it for the consideration of the legislature, your Memorialists deem it proper, as on a former occasion, to remark, that "no intelligent person, it is presumed, will pretend, that the legislature has any constitutional authority to enact a law for the express and direct purpose of laying a tax on the people for the support or maintenance of any church, or any religion of any denomination, or for the benefit of ministers thereof, as such. So neither has the legislature any legitimate power to make any law for the purpose of attaining *indirectly* the same object; and hence laws which in their operation would lead to the same result, would be equally at fault. To the extent that any portion of the community is *privileged* from contributions for the support of civil government, others become oppressed with increased burthens, the principles of equal taxation and impartial justice are violated, and the even balance of equal rights destroyed. To the extent, therefore, that church property and the property of the clergy is *privileged* from taxation, an increased tax is required of the laity or *unprivileged* class of the community, who are thus indirectly, but as effectually compelled by law to pay a tax for the maintenance of churches, the support of religion, and the benefit of the ministers thereof, as if the law bore that title and *expressly* confessed the truth.

By conferring, as these laws do, special privileges on the Clergy and their religious establishments, expressly and solely with regard to their religious profession and character, and in total disregard of the equal rights, the religious opinions, and the secular profession of unprivileged laymen, all denominations of the latter are forced by law (indirectly) to contribute, by tax, to the support

of churches in which they have no interest—to uphold religious systems and creeds in which they have no *faith*—and for the benefit and maintenance of Priests in whose religious opinions and doctrines they have no confidence. Such partial, unequal, and unjust taxation, predicated on considerations exclusively of a religious character, is incompatible with the genius and spirit of the free institutions of our country, inimical to the free exercise of the unalienable rights of conscience, and inconsistent with all those provisions of the constitution which were intended to prevent the civil government of the State from meddling with the religious concerns of its constituents in any other manner than to secure to each individual the unmolested exercise and enjoyment of his own opinions on that subject.

That there is danger lurking in the law in question—that it is pregnant with mischief to the equal rights and liberties of the People, and the republican character of our government, requires no great depth of research, nor herculean effort of the human mind to comprehend.

It is, in truth, too well understood to require proof on this occasion, that all despotic governments have, without exception, availed themselves of the services of the Clergy: and it is as well ascertained that the favoured *sect*, at all times and in all nations, has contributed its influence to sustain *any* government, which in turn offered the requisite *quid pro quo*. Whenever government, therefore, established religion by law, the church has never failed to accommodate religion to the views and interests of the power which established and sustained it. Thus a common interest operated as a mutual pledge to protect and uphold each other. Hence the union of Church and State.

As certainly as that *knowledge is power*, *ignorance* is the source of human weakness and dependence: and as certainly as despotic governments are based on the ignorance and weakness of its subjects, so sure is it that the church established by law stands on the same foundation, and that both are alike interested in the continuance of the causes which give them *being* and sustain their *existence*. To perpetuate human *ignorance*, therefore, has been the *effect*, and has been the interest of all governments constituted of a combination of political and ecclesiastical powers.

But that *wealth* also is *power*, is as emphatically true as that *knowledge* is so: and it is as obvious that *poverty* and *dependence* are the antithesis of the *one*, as that *ignorance* is of the other proposition. This truth has been recognized and acted on at all times in all civilized nations: and ecclesiastical dignitaries have seldom or never failed to manifest their reverence for it by availing themselves of the benefit of the knowledge of it. Thence, the power and influence of the established church have been directed to the acquirement of wealth as constantly as if such was the primary object of church establishments, and the end and purpose of its religious institutions. Gifts to the church and its ministers, and humble submission to them both, have, therefore, ever been lauded as acts of piety, and as evidence of holy zeal for that religious faith

through which the givers are regarded as elect vessels of honor in this life, and assured of eternal happiness in the next. And when we know that the wealth, the power, and the influence of the church has ever been arrayed on the side of the government by which it may have been by law established, and against the rights and interests of the people subjected to it, we are at no loss to discover the causes which have led to despotic power and sustained it; nor are we left to conjecture the causes of the ignorance, the poverty, the debasement, and the misery of the people of all nations which have been subjected to the combined power of church and state despotism.

What but a knowledge of these evils, and a desire to prevent them, could have led to those provisions of the Constitution of this State, which were intended to prevent any legislation on religion, and to prevent any interference, by the civil authorities, with the religious or any other opinions of their constituents, other than to protect each individual in the unmolested enjoyment of his own.

They must be ignorant indeed, who do not know, that like causes produce like consequences: and that the adoption of like laws or other measures of like spirit and tendency to those which have contributed to the ignorance and slavery of the people of other countries, cannot fail to produce similar results in any nation which may be so unwise as to follow such examples. Hence, when we see the clergy of this country, for a series of years, constantly engaged in devising, organizing, maturing, and executing numerous and multiform schemes, by which, under religious pretences, to draw money from the people, and to accumulate wealth—when we know that they have, in various ways, obtained an immense amount, and are adding thereto several hundred thousand dollars annually; by which their means are not only increasing, but increasing in an increasing ratio, to an indefinite, perhaps to an incalculable extent: —when we see them, or those of the most powerful and numerous sects, steadily aiming to make and direct public opinion—to gain political power—to infuse into our political institutions the spirit of proselytism, by which they and their credulous and zealous coadjutors are striving to "encompass land and sea to make a proselyte" —when we hear them denounce as infidels, and stigmatize as immoral men, those whose opinions are not accordant to theirs, nor subservient to their purposes; thus exciting feuds among the people, and destroying the harmony of society:—In fine, when we see them adopting similar measures, and pursuing like means which in other countries have made the church rich and powerful, and the people poor, miserable, and debased; we can but see that there is too much reason to fear, that the accumulated and accumulating wealth of the church, and the consequent and indefinite augmentation of the power and influence of the clergy in this country, is as certainly pregnant with danger to the equal rights and religious liberties of the American people, as that the prototype of such proceedings have been destructive to the rights and liberties of the subjects of ecclesiastical and political misrule in other countries.

And when we also see our civil government leaning towards the measures just noted, and lending its official action to subserve such purposes;—when we see in our statute-book laws by which the wealth of the church and the private property of the clergy are partially assessed or totally exempt from taxation, while that of unprivileged laymen is subjected to increased and increasing imposition, or obliged to bear exclusively the public burthens;—when we see the government, not only in this, but in other instances, as appears by our statute book, and judiciary adjudications, discriminating between those of its constituents who profess religion, or follow it as a profession, and those who do neither; giving a preference, by law, to the former, and to the like extent discountenancing and disparaging the latter, contrary to the principles of our political institutions, and the express provisions of our Constitution as before mentioned;—we think it time—full time, that the people should begin to look about to find a remedy for such wrongs, and apply it, while yet they have in their own hands the power to do so.

As a further illustration of the unjust and mischievous operation of the law against which your Memorialists particularly complain, and also of the propriety and necessity of unremitted perseverance to effect the contemplated reform; your Memorialists deem it proper here to state, that although they have not the means of ascertaining with great precision the amount of property which, by virtue of the law in question, is partially assessed, or entirely exempt from taxation, yet they have sufficient *data* to show, that it may be reasonably valued at many millions of dollars.

There are in this State seven hundred and seventy-four towns, and eight cities, making in all seven hundred and eighty-two. In the city of New York alone, there are one hundred and twenty-five churches, besides other large and extensive buildings and valuable lots of ground, belonging to the Bible, Tract, and various religious societies and corporations; an immense amount of which, under the name of church property, benevolent, charitable, and literary institutions, are exempted from taxation;—and the whole of which, including the immense funds and other personal property belonging to them, have (by many intelligent men who are acquainted with the value of property in the City of New York, and have maturely considered the subject under review) been estimated to be worth at the least twenty millions of dollars.

Allowing an average of two churches in each of the 781 towns and cities, (exclusive of the city of New York) the whole would be 1562 churches; which, if estimated at only three thousand dollars each, the whole amount would be four millions six hundred and eighty-six thousand dollars. To this amount, add the supposed value of the Theological Colleges and Seminaries, and the other property belonging to them (other than in the city of New York,) say five hundred thousand dollars, and the whole amount of property belonging to all the institutions above mentioned, a large portion of which is exempted from taxation, would be at least twenty-five millions one hundred and eighty-six thousand dollars! ! !

But the wrong and injury done to those who are taxed the more, by reason of the exemption of an immense and indefinite amount of property from the general assessment, are not limited to the results of the preceding estimates. The private property of the clergy, to the amount of fifteen hundred dollars each, is also exempted from taxation: and whether they possess that amount or not, in no wise lessens the objection to the erroneous and unjust principles of the laws by which special privileges are conferred on those who choose to follow the business of a teacher of religion for a living; and by which increased burthens are required to be imposed on farmers, mechanics, and all those who follow any other trade or calling for a livelihood.

There are in this State seventeen hundred and forty-one clergymen. Allowing each to possess the amount intended to be exempted, the aggregate would be two millions one hundred and eleven thousand five hundred dollars! This amount being added to the before mentioned sum, (25,186,000 dollars,) the whole would be twenty-seven millions seven hundred and seventy-seven thousand five hundred dollars!!! which being exempted from the general assessment, the property of the unprivileged class is additionally assessed, to make up the amount necessary for the support of the government and laws by which persons and property ought to be proportionably taxed and equally protected, "without any discrimination or preference" on the ground of any religious opinions or profession whatever.

Nor are the objections to the law in question limited to the present extent of its evil operation. It is not only productive of much immediate injustice, but it is progressively prolific of mischief to the farmer, the mechanic, the working-man, and to all other unprivileged members of the community; as we shall now proceed to show.

By the census of 1820, the population of this State was 1,372,812. In 1830, the whole number was 1,913,508—exhibiting an increase of about fifty per cent. in ten years.

In the year 1819, there were in the State, as before mentioned, seven hundred and sixty-one clergy. In 1832, the whole number was seventeen hundred and forty-one; showing that the class privileged from taxation on account of their religious profession, has, in thirteen years, increased in the ratio of nearly one hundred per cent. more than the increase in ten years of the unprivileged, or the tax-paying citizens of the State: thereby proving that the civil operation of the law under consideration is progressively oppressive to the last mentioned class.

Again. In the year 1819, this law exempted from taxation the private property of clergymen to the amount of fifteen hundred dollars each; allowing each to possess the amount intended to be exempted, the whole would be one million one hundred and forty-one thousand five hundred dollars. In 1832, the private property of seventeen hundred and forty-one clergymen intended to be exempted from taxation, was two million six hundred and eleven thousand five hundred dollars; showing that the oppressive opera-

tion of the law has not only increased in a greater ratio than the increase of the unprivileged class, but that it must go on increasing; and the consequent impositions on the tax-paying portion of the community must necessarily continue in a compound ratio, to increase, until the wealth of the church and of numerous other concurrent religious institutions, aided by the number and influence of a rapidly increasing clergy, shall give them the ascendant power in the State: or until an efficient remedy shall be applied to the root of this onerous and growing evil.

Deeming the law in question wrong on principle—partial in its provisions—oppressive in its operations—progressively mischievous in its consequences—discordant with the principles and the spirit of our government—adverse to the express provisions of the Constitution, and dangerous to the equal rights and the religious liberties of the people; your Memorialists respectfully request that the legislature will not only see fit promptly to repeal it, but will also erase from the statue book, all other laws which create unjust, ungenerous, and uncharitable distinctions among the constituents of the government, on account of their religious opinions or professions, or under any other religious pretences whatever.

All which is respectfully submitted, in full faith that the foregoing objections to the law in question are well taken—that the statements herein contained are substantially true—that the reasoning thereon is strictly accurate—that the complaint of your Memorialists is obviously just, and that the prayer of the petitioners ought to be granted.

[And which was accordingly granted by the legislature of the State of New York.—When will Britons be so wise?]

DIGESTION. ESSAY III. — *The Stomach. Description of the Stomach. Its Arteries. Nerves. The interesting functions of the Pyloric valve. Conversion of food into Chyme. Practical Remarks. Old adage: "After dinner sit awhile." Experiment on two Dogs. Cab Horses. Sedentary Habits.*

IN the Essay in the preceding Number, the food was left in the stomach: that is, the processes by which the food is acted upon, and through which it passes, until it arrives in the stomach, were noticed.

In the stomach the most important changes take place: and as these changes cannot be understood without some understanding of the nature of the stomach itself, it seems proper to preface the history of these changes by a short description of this part of the human machine.

The œsophagus or the gullet was stated to end in the stomach: by this is not to be understood that the gullet fits into the stomach like one tube might fit into another. The stomach is merely as it were a swelling or enlargement, a spreading out of the gullet. Indeed, the whole intestinal canal, which will be described in all

its parts before these Essays on Digestion are completed, is nothing more than *one* tube, which receives different names in its different parts: names given from some difference in size, situation, and duties performed; but not because the parts are distinct tubes. In fact, the intestinal tube commences at the lips and ends at the arms.

The stomach itself is a membranous bag, Plate III., its shape being represented by the wood cut. It has two openings (*a*) called the *cardiac*, that is, where the œsophagus or gullet ceases; and (*b*) called the *pyloric*, where the next intestine, called the duodenum, commences. It has besides two curves (*c*) the less and (*d*) the larger: also a bulging extremity (*e*); *f f f f* the duodenum.

The stomach is membranous: and the membranous matter, of which it is composed, can be separated into *four* distinct layers; the outer, called the *peritoneal;* the next more internal, called the *muscular;* the third still more internal, called the *cellular;* and the fourth, which forms the inner lining of the stomach, called the *mucous*. The last is in folds, and presents a very wrinkled appearance, and is always covered with a degree of moisture, and has innumerable little glands which open by very small openings on its surface.

This latter membrane has a peculiar fold at the point where the œsophagus ends in the stomach, and also at the pylorus; where,

aided by some fibres from the muscular coat of the stomach, and also by some from the cellular coat, a ring, or rather a fold, is formed, called the *pyloric valve*, because it, as will presently be seen, acts the part of a valve.

The situation of the pylorus corresponds internally to the part externally, that is called, the *pit of the stomach.*

The stomach is supplied by very large and very numerous *blood vessels* called *arteries.* Three great arteries supply this organ: and spread over the stomach by almost innumerable branches; and, penetrating through its coats, become, when arriving on the innermost, (the mucous coat,) so delicately and minutely expanded as to form a net-work, which is recognizable only by a general rosy tint spread over the membrane.

It has an equal number of *veins*, which carry back the blood after the same has been used for the purposes for which the arteries carried it to the stomach.

The stomach is abundantly supplied with *nerves*, which are spread over it in every direction.

Such then is the stomach; and when the quantity of blood with which it is supplied, the numerous nerves which connect it with the brain and with all parts of the nervous system, and, finally, the peculiarity of its structure, are taken into consideration, the name by which it has been known, namely, the *king of the viscera*, appears justifiable.

The food being introduced into the stomach, is forthwith acted upon by the coats of this organ. The muscular coat makes the stomach to contract upon the food thus introduced: and this motion, called *peristaltic*, aided perhaps by the *heat* of the stomach, but more particularly by a singular fluid, called the *gastric juice*, is converted in the course of three or four hours into a soft similar-looking mass, called *chyme:* that is, however various the foods introduced are, they all lose their individual character, and become converted into one mass of a similar nature.

Many causes have been urged to explain this wonderful change. The principal agent is the gastric juice; and, as such, its properties and powers may be more fully considered.

Abbè Spallanzani paid particular attention to the gastric juice. He established the dissolving power of this juice, (which appears to be secreted by the vessels situated in the coats of the stomach,) by introducing into the stomachs of animals solid tubes containing meat, the tubes having holes bored in them: and he found that the meat was dissolved. And still further to establish this power, he introduced sponges into the stomachs of animals, and, after a time, withdrawing them, found that the juice they contained still exercised, even out of the body, the same solvent power.

Another fact, established by the experiments of Spallanzani, is, that raw flesh and unbruised grains are scarcely acted upon by the gastric juice; while cooked flesh and triturated substances are promptly dissolved.

Another fact, established also by the Abbè, is, that the gastric juice has an *antiseptic* power: that is, a power of depriving meat

that is partly putrified of its putrid character, when introduced into the stomach. This readily explains the fact of the Esquimaux living upon putrid fish and yet digesting it: also the capability of the highly civilized Esquimaux (bons gouts) in London, who eat venison, when almost in a state of maggot-producing.

Another peculiar character of the gastric juice is exhibited by the property, which *rennet*, sold by milk-men for coagulating milk so as to make *curds* and *whey*, possesses. This, which has in some respects acid properties, is obtained from the stomach of the calf.

This gastric juice, it is worthy of repetition, aided by the muscular coat of the stomach, which produces a kind of semi-rotatory motion, aided also by the heat of the stomach, and aided still more by the nervous power, dependent upon the liberal supply of nerves, which the stomach has, converts the food, however various it may be, (and variety in excess is to be seen too often) into one similar, homogenous mass, called *chyme*.

One remarkable provision here presents itself. Supposing an individual takes into the stomach articles, which the gastric juice, aided by the agents already noticed, cannot convert into chyme, these indigested articles pass according to the ordinary course of digestion to the pylorus in order to proceed into the next intestine: but the valve, already described, stops them and will not allow their passage; and they are sent back in order to be digested. A perpetual disturbance of the stomach is now occasioned. Gas, which, in a regular digestion, is not generated by the vessels of the stomach, is found, and acid, fetid eructations take place. The irritation goes on increasing, and, at last, sickness comes on, and the undigested lobster, crab, ham, again return to the world through the same channel as that by which it was temporarily received into the stomach. Such is the protection which this valve affords. It is true, if the undigested mass is not vomited up, the valve seems to become habituated to it, and allows the passing of the intruder, who, by his constant solicitations, gets admission into the next intestine, there to continue the irritation, which he has already excited in the stomach. Thus is explained the circumstance of men swallowing and passing pen-knives and other indigestible matter.

During digestion, that is, during the conversion of food into chyme, there is a general determination of nervous power, also of blood to the stomach: a slight chilliness from these causes is often felt on the surface. This, however, is soon succeeded by a genial warmth: a pleasant feeling of satisfaction arises. Strength is gained, capability for exertion is felt, and life is acknowledged to have, at least, one time in which neither bitterness nor vexation of spirit is, of necessity, present.

The practical remarks on this most interesting subject will be detailed in the next Number.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

DECEMBER 1, 1835.

PRINCIPLES.—A PETITION TO PARLIAMENT.—OBEDIENCE AND HAPPINESS—DISOBEDIENCE AND MISERY.

It was determined before bringing this Magazine into existence that it should be the exhibitor of UNIVERSAL PRINCIPLES. Details, it is true, it was seen, must be given: but these would be given with the view, not of invidiously holding up certain individuals to censure, but of showing the consequences of the violation of these universal principles, attention to which is essential to happiness.

Whether the violations relate to the *physical*, the *moral* (and this embraces SOCIAL and POLITICAL), or the *religious*, or the *intellectual* condition of man, it matters not. An instructive illustration occurring, it will be presented to the notice. Hence, in the last Number, the Memorial to the State of New York was introduced as a masterly Essay, to prove the injury arising from the violation of that law of civilized society, that, as *all men, in respect of their civil relationships, are protected by the civil government, all men should contribute according to the degree of protection, to the expence therein incurred.* This is a law, which as real, the very constitution of nature might be brought forward to demonstrate: the evils and the injustice, arising from its violation, were pourtrayed clearly in the Memorial referred to.

Believing this law to be a law; believing that society cannot be in a proper state till this law is attended to; believing this law and others similar to it are perpetually subject to violation: and believing that it is man's duty to labour to promote human happiness, to be obtained only when that violation ceases; it will be the aim of those connected with this Magazine to impress such laws on the public attention: and, in effecting this, illustrations of the injuries, too numerous unfortunately, resulting from the violation, will be brought before the reader on favourable opportunities.

It may be asked, Why adopt the invidious method of depicting the violations? Why not point out the laws, and leave the detection of the violations to others? The answer is simple; Man in his present state is affected most by the violations; the abstract law would not excite his attention: the illustrations of the law by the injuries arising from the violation appeal to those faculties, which are most powerful in his character.

The violation, in the case referred to in the Memorial to the New

York State, consisted in exempting certain human beings, because performing certain duties, called *clerical*, (duties, be it remarked, assumed by themselves without any obligation imposed by the State, and undertaken of their own free will, without any force by society) from paying to the support of the means necessary to the protection of civil rights, which they wish to and do enjoy with the rest of the community.

Such *was* the violation of the law specified at New York. In Great Britain and Ireland the violation of this law assumes a more complicated character. For, in these countries and in many others, these clerical individuals have obtained so great an influence with the powers that be, as to have been successful in forcing a particular creed and a particular ceremonial upon the nation, which they oblige the nation to support. That is, they have passed beyond the mere exemption from the payment towards the expence of the civil government; but have made the civil government to tax the nation in order to raise a sum* out of which these individuals receive their pay, as belonging to a particular order, as performing certain, not *civil*, but *devotional* duties. In other words, they have made the State forget its duty in looking after the civil rights of the community, and have persuaded the State to violate these civil rights in offering a premium to make hypocrites by the expression of a particular set of opinions. So that a man's opinions, although the man is protected in his civil rights by a civil government, are to have the magic power of freeing him from his share in the burdens connected with the carrying on of this government. Truly, these opinions are goodly things.

These clericals have many exemptions besides this payment received. They are not obliged to sit on juries; they are not made parish officers, such as constable, headborough, overseer; they are free to travel on Sundays without paying turnpikes, that is, if they travel to preach; they are not obliged to serve in the militia; but where it promotes the gratification of their pride, they are allowed to sit on the bench.

Now, it is quite evident, that if the number of clergymen in Great Britain and Ireland amount to 10,000, the times which the individuals who are called to serve on juries must be increased by the exemption of these 10,000: so in reference to parish offices. If these individuals are allowed to travel free of expence it is evident that, as their travelling wears out the road to which they do not pay, the laity must pay more than their own share for the repair of these roads: and, as these men are exempted from serving in the militia, the parties who are not exempted must have to serve so much oftener.

These are, however, trifling, compared with the enormous evils, arising from this violation; and such have never been more succinctly pourtrayed than in the following Petition, which therefore may appropriately stand in order next to the Memorial to the State of New York.

---

* For the immense amount of these sums see No. II. Christian Physician.

To the Honourable the Commons of Great Britain and Ireland, in Parliament assembled.

The humble Petition of the undersigned Members of the Scotch Baptist Church, and other Dissenters in Liverpool,

Sheweth,

That your Petitioners beg respectfully to remind this Honourable House, that, in the Apostolic and purest age of the Christian Church, Christianity was widely diffused and professed among the nations, not only without any aid from the Civil Powers, but even in spite of the cruel persecutions which its professors endured from the hatred of governments.

That it appears to your Petitioners, that Civil Governments are ordained for Civil Purposes only, for the protection of all good subjects, and the punishment of evil doers; and, therefore, that *human legislation* ought to be entirely confined to *secular* affairs, as its proper province.

That your Petitioners are persuaded that no Government has a right to prescribe or dictate to its subjects any system of Religious Doctrines, or any form of worship, which they should believe and practice, as this would lead to an endless and conflicting variety of established systems, would be destructive of the right of private judgment, and of the hallowed maxim, that God is the only Lord of the conscience, and to Him alone is man accountable for his religious belief and practice.

That your Petitioners are fully convinced that all attempts to promote Religion by Civil enactments must be ineffectual, since these can produce nothing more than an *outward conformity to the form and ritual* prescribed; that they are useless, since truth needs no other support than its own evidence; and that they are destructive of true Religion, as this must proceed, not from the influence of human laws, directly or indirectly, but from personal conviction and choice, and, in order to be of any value, must be a willing tribute of man to his Creator, from a sense of His authority.

That, to grant any sect, whether Episcopalian, Presbyterian, Independent, or Baptist, an Establishment by Law, which confers peculiar privileges, endowments, and worldly emoluments, appears to your Petitioners to be a partial and unjust preference, inconsistent with *that equality of privilege* which a just Government is bound to secure, as a *natural and indefeasible right* to *all* subjects who live in peaceable submission to the laws.

That, judging from the New Testament, as well as from reason, your Petitioners conscientiously believe all National Establishments to be Anti-Christian, being opposed to the doctrines and laws of Christ, who has declared, that "His kingdom is not of this world," and who has ordained that his Churches should consist of believers of the Gospel only, and that his Ministers should be supported by the voluntary contributions of the faithful; and your Petitioners consider it as a severe and unjust hardship that they should be

compelled to support a system which inflicts injuries, without conferring any benefit upon them, and which they conscientiously disapprove of, as a great corruption of Christianity, especially as the adherents of the sect calling itself National are not better subjects than your Petitioners, or the great body of Dissenters, nor more ardent lovers of peace and good order, justice and benevolence; nor more disposed zealously to support the enlightened and equitable measures of His Majesty's present Government.

Your Petitioners most respectfully request this Honourable House to reflect upon the mournful effects which are justly to be ascribed to the Alliance between Church and State, in our own country, even under Protestant Governments; and your Petitioners are persuaded this conclusion must follow, that this Alliance, instead of producing the heavenly fruits of peace, charity, and good-will among men, has subverted those moral and social principles which should unite the members of society, and has been deeply stained with intolerance, cruelty, and crime. And your Petitioners cannot contemplate the exaction of Tithes in Ireland at the point of the bayonet,* and with the loss of many lives; and the still increasing claims of the Clergy in England, without being convinced that the State Church, which sanctions such enormities, abandons the Apostles as her guide and example, degrades both Religion and its professed Ministers, tends to alienate the affections of the people from Government, and should, therefore, be brought to an end.

Your Petitioners, therefore, while desirous that they may be relieved from those practical grievances under which, as Dissenters, they have long and unjustly laboured, earnestly pray this Honourable House, that the connexion between Church and State may be immediately dissolved; that all Religionists, living in obedience to the laws, may forthwith enjoy equality of privilege; that the adherents of each system may be left to support their own, without prejudice, favour, or pecuniary emolument from the Government;

---

* This Petition was presented the Session before last, and now we are happy to find, from the following important Letter from Lord Morpeth, that the Government have refused such aid :—

DUBLIN CASTLE,
October —, 1835.

SIR,

IN reply to your Letter of —— I am directed by His Excellency to acquaint you that he cannot comply with the application. His Excellency does not deem it expedient in this, or in any other case of the enforcement of *civil rights* by distress, that either the military or the police should be called out, unless their presence shall be rendered necessary by actual riot, or breach of the peace. In such cases the military and the police will be directed to attend, on the requisition and under the control of the local authorities; and distinct orders will be given to provide, as far as possible, for the repression and the punishment of all violators of the public peace.

I have the honour to be, SIR,

Your obedient Servant,

MORPETH.

and that Christianity may be allowed to rest on its own basis, as its great Author intended.

Your Petitioners are confidently persuaded, that, in addressing your Honourable House, it is their bounden duty thus openly and honestly to avow their sentiments and wishes, in the firm conviction that they are founded in truth and justice, and must finally prevail; and that no measure of Church Reform that falls short of a complete severance of Church and State, can be either equitable or permanent; while they are of opinion, that the measure they pray your Honourable House to adopt will prove the most powerful means of removing the discontents, and relieving the burdens of the Country; of doing to all, without respect to persons, that equal justice which is their undoubted right, and of promoting, legitimately and successfully, the interests of pure and undefiled Religion.

And your Petitioners will ever pray, &c.

DROWNING AT SEA SOCIETY.—DISOBEDIENCE AND MISERY—OBEDIENCE AND HAPPINESS.

It is quite common for persons, even in the present enlightened times, when hearing of a shipwreck in which the crew and the passengers are buried in the ocean, to ejaculate, "How inscrutable are the ways of Providence," and to argue as if Providence was engaged in destroying these individuals. They blame Providence for what is man's doing. They believe God to be the actor, when man really is. The utterance is made, and the matter is soon forgotten. Another shipwreck occurs; similar ejaculations escape. The will of Providence is again brought forward as the means of quieting the disturbed condition of the mind, induced by such events: and nothing is done to prevent the repetition of these evils, these sad disasters. In fact, so far does this fatalism extend that attempts to obviate these evils have been considered as impious. When vaccination was first introduced it was opposed, as interfering with the prerogative of Heaven to destroy, when Heaven chose, by smallpox, the beauty of the human countenance, and even human life itself. When lightning rods were first attached to houses,* the mob in several instances attempted to destroy the habitations of those who had the daring impiety to protect themselves from the thunderbolt, which these ignorant people, the mob, instigated in

* About the year 1776, Morveau had metallic conductors erected on the house of the Academy of Sciences of Dijon. On this account he was attacked for his presumption in disarming the hand of the Supreme Being. A multitude of fanatics assembled to pull down the conductors, and they would probably have done much mischief, had it not been for the address of M. Maret, the Secretary, who assured them that the *astonishing virtue of the apparatus resided in the gilded point, which had been purposely sent from Rome by the Holy Father.*—Thomson's History of Chemistry, Vol. II. p. 181.

most cases by priests, pretended to imagine took away from the Deity the right he had of hurling thunderbolts at individuals' habitations. These ignorant men little thought that the inventors of vaccination and of lightning rods were merely *applying the laws of the Creator*, appointed by the Creator for man's good, to purposes to which these laws were legitimately applicable, and must be applied before man can be happy.

So, in regard to wrecks and the destruction of human life at sea. Many men seem to think that it is God's direct interference that makes a ship descend to the bottom. In the majority of cases we might, with as much propriety, refer the falling down of an unstable built house on a windy night to the direct agency of the Deity as the sinking of ships, (made for sinking,) in a stormy sea.

Indeed so far from God being an agent in the horrible destruction of human life, which takes place upon the ocean, it will be attempted to demonstrate in the following pages, that, there exists *a society, constituted for the purpose of drowning people:* That this society, when realizing the object of their foundation, cover over the foulness of their deeds by ascribing the result to the visitation of Providence: that, further, this society, notwithstanding the exposure of their misdeeds, still continue in the abominable plans by which they realize wealth in the drowning of men: And, finally, that the Government of the country, in which the society exists, patronizes the society, because realizing from its funds, a large annual revenue.

Such things are:

Not in despotic Russia; in luxurious Asia: not among the barbarous Esquimaux, but in refined, civilized, enlightened, free, Britain.

The proofs that such things are will now be afforded; and, in presenting these, it is not done with the view of calling down vengeance upon the class of society engaged in this dreadful work, but with the view of demonstrating, that as obedience to the laws of the Creator and happiness, and disobedience to the laws of the Creator and misery are concomitant, it is our duty to use every legitimate means for destroying the power, and thereby limiting the operation, of so destructive a society.

To render the evidence more striking, it will be brought forward in the forms of proofs and illustrations of the following propositions:—

1st. That ships are built with the expectation that they will sink.

2nd. That it is the interest of ship-builders not to build strong ships.

3rd. That it is the interest of ship-owners under the present system that ships sink.

4th. That ships, thus built to drown people, afford a considerable revenue to Government.

5th. That ships can be built so that it would be impossible that they could sink.

6th. That it is an insult to the Deity to charge the calamities of the deep upon Him as the effects of His visitation, when actually these calamities are the results of man's violation of His laws.

Before examining these propositions, it seems proper to state one law, universal in its application, *That any body will float in water that is lighter than the weight of a quantity of water equal to it in bulk.* A ship therefore must, being composed of materials lighter than water, float; that is, unless bodies of so great a weight are introduced into the vessel that the increase of weight thus produced amounts to more than the weight of the water of a bulk equal to the ship containing these things. But if, through an opening in the vessel, the supporting liquid becomes the filling liquid, it is quite evident that any heavy body will sink the vessel: because then the weight of the vessel is equal to the weight of the water: water being outside the wood and inside also. Still the vessel even when filled with water would float, if no body remained in the vessel heavier than water.* Such are the consequences of the law: and such are the difficulties in the way of a ship being sunk.

These prefatory remarks being made, the first proposition may be examined. It is, THAT SHIPS ARE BUILT WITH THE EXPECTATION THAT THEY WILL SINK.

A ship is composed of three parts: 1st. The *ribs* or timbers, constituting the middle part of the bottom and of the sides: 2nd. The *outside casing* of these ribs are made of boards, technically called planks: and 3rd. *The inside casing* of the ribs, made also of planks. The ribs, as will be perceived from the description, are first put up: then the outside casing, and then the inside. In *merchant vessels* the ribs are separate one from the other, and consequently oppose no barrier to the admission of water. The inside casing is never made to keep out water. The outside casing is therefore the only protection.

This outside casing, it may with propriety be supposed, will be made so strong, (as this is the only protection, the only positive separation between the depths of the ocean and the human beings floating thereon,) that the protection afforded will be good. The question will therefore at once occur, *What is the thickness of these planks?* these shutters out of watery death? The answer shall be taken from Lloyd's Register of British and Foreign Shipping.† "Thickness of outside plank from bilge to keel, including all the bottom, for a vessel of 150 tons, $2\frac{1}{2}$; and for a vessel of 500 tons, 3 inches thick." Here then, reader, pause and take the consolation to yourself, that you have when riding upon the ocean a plank between you and the bottom *two and a half*, or *three inches* thick. But you have not even this. For these planks

* To convince of this, fill a wooden cup with water in a basin of water, it will float. Put in a small piece of metal it will sink; and why? Because the weight of the metal more than counterbalances the difference of weight between the wood forming the vessel and the water surrounding the vessel on its outside.

† Lloyd's is a name perpetually in the papers connected with shipping. Lloyd's List stands prominent in almost every Newspaper. Now this term Lloyd's is representative of a Society that will insure vessels that go to sea. The parties who manage this are called *underwriters*, because they sign an agreement that they will pay to A. B. a certain sum upon the loss of a vessel provided A. B. will pay them so much in advance, or annually.

need to be united together by means of a substance called *oakum*, which is introduced into the seams, where the planks join. This rarely penetrates more than *two inches*: hence two inches of substance may be said to be the sum total of your protection. Conceive what must be the consequence if these planks happen to be of bad timber, such for instance as much of the Canada timber, which the Government of this country oblige the people to use, because good Baltic timber, from the heavy duty fixed upon it, is rendered so dear as to be shut out from common uses.

But still more to ensure the certainty of the ship sinking, the ribs are not made compact. One would imagine that these ribs, which form the frame work, would be so tightly bound together, that no power could separate them: that each set would be bolted, barred, and even framed into one another, if possible. But what is the fact? The following quotation is from Lloyd's Register: "Every alternate set of timbers to be framed and bolted together." It follows from this, that every alternate set of timbers is not framed or joined together. The danger and the weakness to the vessel thence arising may be rendered evident to every one by the following illustration: If a carpenter, in putting a roof upon a house joined only every alternate rafter together, the rafters that were not joined, so far from adding to the strength of the roof, would weaken the same, not only by their own weight, but also by the weights resting upon them. The same must happen with a ship.

In regard to the inside casing no care is taken to make the same water tight: so that it is literally true, that there is no other protecting power between the water and the individuals floating upon the water than a three-inch plank.

The inference from this construction of ships is, that the proposition stated is true. But when this inference is supported by facts, so astounding as to be scarcely credible, yet so established as not to be denied, the truth of the proposition will be flagrantly apparent. It appears from an examination of Lloyd's List from the year 1793 to the commencement of 1829, that the number of British vessels alone, lost during that period, amounted, on an average to *no less than one and a half daily*.

The following account of loss and accidents of British Vessels, is extracted from Loyd's List of 1829:—On foreign voyages, 157 wrecked: 284 driven on shore, of which 224 are known to have been got off, and probably more; 21 foundered or sunk; 1 run down; 35 abandoned at sea, eight of them afterwards carried into port; 12 condemned, as unseaworthy; six upset, one of them righted; 27 missing, one of them a packet, no doubt foundered. Coasters and colliers:—109 wrecked; 297 driven on shore, of which 121 known to have been got off, and probably many more; 67 foundered or sunk; 4 of them raised, 6 run down, 13 abandoned, 5 of them afterwards carried in; 3 upset, 2 of them righted; 16 missing, no doubt foundered. During the year, 4 steam vessels were wrecked; 4 driven on shore, but got off; and 2 sunk.

To establish still more fully the enormous injury inflicted upon

society to establish on indisputable grounds the truth of the proposition, the following extract from a speech of Baillie Andrew Arthur of Kirkaldy.

"What then is the real state of matters in reference to this subject? From a late respectable periodical (the Edinburgh Review) we are enabled to state, that, on examining Lloyd's List, it appears that from the year 1793 to 1829, the losses, in the British mercantile navy only, amounted, at an average of that period, to *five hundred and fifty-seven vessels a year.* But, great as this amount of loss is, has it suffered any diminution since that time? No. It has, on the other hand, most materially increased; in 1833, no fewer than eight hundred merchant ships, or the thirtieth part of the whole number of ships belonging to the British dominions, including the plantations, were either lost or driven ashore. We are informed in another popular journal, (Chambers's Edinburgh Journal), that, in two months of that year one hundred thousand tons of British shipping,were reported to have been lost. Now, as there are about forty men for every one thousand tons of shipping, here were the lives of four thousand men, exclusive of passengers, put in jeopardy, of which probably one-half were lost."

Having thus established the truth of the first proposition, namely, THAT SHIPS ARE BUILT WITH THE EXPECTATION THAT THEY WILL SINK, the next point of importance is, to add to the evidence already given of the disregard for human life and for human property, other facts illustrative of the second proposition, THAT IT IS THE INTEREST OF SHIP-BUILDERS NOT TO BUILD STRONG SHIPS.

In proceeding with the investigation of these propositions, feelings almost too painful calmly to consider the subject press upon the mind. These, in order that justice may be done to all parties concerned, must be set aside, although the Essayist acknowledges that in writing the very words which his pen has just marked down, he feels sad at heart.

In reference to this proposition, Mr. Ballingall remarks, "It is notorious, that if a ship-builder builds on sale a strong and safe merchant vessel, he cannot sell it. Why? Simply because there is no demand for an article of the kind. Indeed, nothing is more common than to hear ship-builders say, that if they could get old vessels to repair, they would never lift a tool in building a new one. Why? Simply as said before, because they cannot get paid for their material and labour. And, as it is a rule in all other matters of merchandize, that as is the market so is the state of supply, it will be so in reference to ships. When ship purchasers are obliged to have strong ships, ship-makers will build them. The object of this Essay is to make the public make them.

To evidence the impossibility of selling a good ship, the following fact comes very opportunely. A very superior ship, observes Mr. Ballingall in Tait's November Number, was lately built by Messrs. Menzies and Sons, Leith, in expectation of sale for the East India or China Trade. Not being saleable, merely because *she was a good ship*, she was fitted out and sent up to London,

where I understand she still remains unsold. Her register is 475 tons, and the ship being built at £16. expence per ton, requires an outlay of capital equal to £7600. The proprietors are losing the interest upon the capital invested in this good ship, not sold because it is built strong.

But it may be asked, Why should ship-owners desire to have these weak unsafe ships? Why should they, as benevolent men, consent to allow the lives and the properties of those who trust themselves or their property in their ships, to be so decidedly in danger of irretrievable loss? The answer may be found in the demonstration of the truth of the third proposition, namely, THAT IT IS THE INTEREST OF SHIP-OWNERS, UNDER THE PRESENT SYSTEM, THAT SHIPS SINK.

The statement in this proposition is a sad testimony to the influence of circumstances on human nature. It might almost be considered a parody on this nature, degraded as it has been and is. The truth, however, of the proposition, no person will doubt after the statements now to be made.

The first reason why a ship-owner uses ships that will sink may be made apparent by the following illustration. If a person can earn as much money with a cart, a post-chaise, a stage-coach, or a vehicle of conveyance of any description whatever, which costs only £5. as he can with a similar vehicle which costs £10. it is evident he gains at the outset £5. But, if in addition, he can get other persons to agree for the payment by him of a certain sum of money per year, that whenever the vehicle is destroyed they will pay the whole amount of its value, namely £5., it is evident that as the payment made by him is in proportion to the sum to be paid to him, namely, the value of the vehicle, he will, if he paid £10. for the vehicle, have to pay double to the parties, who find the money, (called insurers), for insuring the vehicle, than he does when the vehicle is only £5. He would thus lose not only the increase in the original cost, but also the increased *interest* upon the increased cost of the vehicle. Here then is motive No. 2 for his purchasing the cheapest vehicle; the cheapest vehicle, be it remembered, enabling him to earn as much money by conveyance as the strong. Again, the vehicle getting old, wants repair; he finds that it becomes a tax upon his pocket to keep it in repair; he knows that when it is lost or destroyed he shall get his £5. for it, and that with this £5. he can purchase a new vehicle. He therefore neglects repairs, and thus more speedily gets rid of his incumbrance, and receives his £5. for it. Here is motive No. 3 for purchasing a cheap, not strong vehicle.

Apply this illustration to merchant ships; and equally apparent will it be, that it is the interest of the ship-owner to have an unsafe ship; that it is so weak that it will go to pieces and be lost! The ship-owner sees two ships, one weak, charged £500. the other, a strong one, charged £1000. The one at £500. will carry as many passengers and as many goods as the one at £1000. He can, in other words, earn as much money with the one as with the other. It is quite evident that it is his interest to keep the weak ship,

because he realizes as great an amount of profit upon a capital of £500. as he would do on a capital of £1000.,that is, the latter sum being the purchase-money of his ship.

But it will be said, yes, this might *be if the ship be not lost*, which, being weak, it is likely to be. He then would lose his £500. which if he had bought a strong ship at £1000. he would not, because the ship would, it is likely, be not lost. But, here we are met again by the fact, that he can insure his ship at £500.; and realizing as much by the ship at £500. as he would by the one at £1000. if the ship be lost, what does he mind, because he gets the full price he gave for his ship.

But it may be urged, yes, so he would, if he gave £1000. for his ship, and then insured it. But is it not perfectly apparent that he is losing the interest upon the amount of the additional capital of £500. when the ship cost £1000. In other words, in the one case, he gets a certain profit upon a ship, purchased at £500. and the same amount of profit he gains upon a ship which costs £1000. The difference in price between the two ships, as the profit from both is the same, must be attended with the loss of the *difference* of the *interest* of the capital between the £500. and the £1000.

It may, however, be urged, that, though this is the case, still as the weak ship will need more repairs than the strong ship, the difference in regard to original cost will be made up to the ship-owner in the saving thus effected. But it is the interest of the ship-owner to avoid repairs as much as possible: for the sooner his vessel becomes a burden by this point of view, the sooner he gets rid of it the better, because he gets the whole price from the insurer.

But there is another reason why the ship-owner likes a weak vessel, and why he prefers the ship being *destroyed* to its being merely *injured*, and therefore avoids repair as much as possible. This is founded upon a circumstance connected with the management of insurance, namely, that when a ship is *injured*, the underwriter pays only *two-thirds* of the damage done, on the principle that he gives *new* materials for *old;* whereas, when the vessel goes to pieces, he pays the *whole amount*. Thus, two vessels get ashore: one, weak, which cost £500., and the other, strong, which cost £1000.: the weak vessel goes to pieces, and the £500. is paid by the underwriter. The strong vessel succeeds in getting off with damage however to the extent of £500. Here the ship-owner does not get, as he did in the former instance, £500., but merely £333. 6s. 8d., two-thirds of the damage. Is it not then the interest of the ship-owner to have his ship go to pieces, and get the whole amount of the original cost, rather than to have damage done to his ship, and get only two-thirds of the damage? With a weak ship, it is quite evident, that he is more likely to realize this total destruction, than with a strong. And when, to this is added, the additional expence thrown upon the ship-owner by detention, while the damages are repaired, which he cannot obtain from the underwriter, additional motives are afforded for him to have a ship so built that it shall sink.

Any person, who thinks upon these facts, must feel convinced, that it is the interest of a ship-owner, *if he insures*, to have a weak

ship, to have a ship that will go to pieces. Indeed, let any person reflect upon the carelessness about *furniture*, which would be induced, if the furniture is insured, and the insurance money was to be paid when the furniture is *broken*. Persons would take no care of their furniture, because they knew when broken they would get their value in money. The insurance companies do not insure for *such* modes of destruction; but merely for fire: and even here, so strong is the motive to get the insurance money, that houses are occasionally fired: that is, the insurers endanger life not only of themselves, but of others, by the use of that most terrible element, fire. They commit *arson*.

But ship-owners have *their sea furniture*, if we may so speak, insured against breakage: and if their furniture is well broken up, they get all the value; if only partially broken up, they have to receive only the two-thirds of the cost of the damage.

It is evident from these statements, that by the present system, the honest man, who has a strong ship, is punished by loss of property; and the knave, with a weak vessel, is rewarded.

Such are some of the reasons why the ship-owner does not venture to buy a strong ship. There is an additional reason dependent upon the nature of marine insurance, which feature in the system, if not speedily altered, legislative interference must be sought after to make the society of insurers listen to the voice of reason and self-humanity. But this subject will be examined in the next number.

ABSOLUTE AND LIMITED MONARCHY COMPARED BY THE LORD CHANCELLOR FORTESCUE.

Hyt may peraventure be marvelid by some men, why one realme is a lordschipe royall, and the prynce thereof rulyth yt by his law, called *jus regale*, by a lawe callyd *jus politicum et regale*, sythence thes two prynces beth [be or are] of egall astate. To this dowte it may be answeryd; the first institution of thes twoo realmys is the cause of the dyversyte. When Nembroth [Nimrod] by might for his own glorye subdued to hymself the first realme by tyrannye, he governed not by any other rule, or lawe, but his own will, for the accomplishment thereof he made it. Holy scripture denyyd to call him a kynge. He was a tyrant, and called *primis tyrannorum*, [the first of the tyrants]. But holy writ calleth him *robustus venator coram Deo*, [a mighty hunter before the Lord]. For as the hunter takyth the wyld best for to sele [slay] and eate hym, so Nembroth subduyd to him the people with myt to have their service and their goods. But afterwards, when mankynd was better disposyd to vertue, greete communalities onyng [uniting] into a realme ordeynd to be ruled and justifyid by such lawys as they al would assenten unto.—*Extracted from Dolby's School of Reform.*

PHRENOLOGY, BY JOHN EPPS, M. D.

Essay IV.

Intellectual Faculties. *Perceptive Powers. Language: The History of the Discovery. Individuality. Form. Size. Weight. Colour.*

Having in the preceding Essays endeavoured to establish the general principles upon which phrenology rests, in this Essay an attempt will be made to illustrate these principles by particulars: these having reference to the organs of the Intellectual faculties.

These organs constitute, when grouped, the whole of the train situated immediately behind, and constituting the forehead. When large, they make the forehead to be large. It is found, by observation, that the foreheads of men differ much in form. Some have a great fulness at and along the brow: others have the forehead very full along the central part, giving a degree of tenseness; and some have the forehead most large along the upper part. Individuals, endowed with these differently shaped foreheads, will be found to differ in their intellectual powers. Those with large developments along the brow, will be seen to be quick, shrewd, and generally rapid in the utterance of matters of detail. Those with the central part largely developed will pursue mathematics and other exact sciences with delight. And those with the upper part largely developed will be found to be fond of reflective exercises, of inquiring into the causes of things; and if they have the lower part of the forehead small, they will be liable to fall into the mistake of building ships, as Lord Bacon so pithily remarks, with materials not sufficient to make a boat.

In accordance with these, easily verified, facts, phrenologists have discovered that there are distinct classes of intellectual faculties. The *perceptive*, *represented in the wood cut*, p. 9, forming the lower part of the forehead called the brows; the *relative*, forming the central part of the forehead; and the *reflective*, forming the uppermost tier.

Of the Perceptive powers, the first organ to be noticed is that of Language*.

As the discovery of this organ was the foundation of phrenology, and, as, in addition, the history of its discovery may serve the purpose of illustrating the mode of observation adopted by Gall in his investigations, it seems proper to give a full account of the circumstances connected with its discovery. Gall, when quite a boy, was often reprimanded by his tutor for not being able to compete with another boy, who was educated with him, in *learning by rote.* Leaving this tutor, Gall went with the same schoolfellow to a school containing 30 boys, at Bade. Some of these boys who were at the eighth or tenth place in many exercises, rose to the highest

* Marked No. 29.

place in lessons committed to memory. Two of these excelled Gall's companion; and in all three the coincident circumstance manifested itself of the eyes being so prominent as to occasion the boys to be nicknamed "yeux de bœuf," or "bull's eyes." Gall afterwards went to a school at Bruschal, and observed that those, who excelled him in the power of committing to memory, had the projecting eye. At the college of Strasburg, whither Gall next went, he was struck by the observation of a similar coincidence; and was at length led to the conclusion that the particular power exhibited by these individuals might be connected with this peculiar shape of head.

Having entered at this time upon the study of those sciences connected with medicine, he was led to enquire, *are not these developments connected with the development of the different parts of the brain*, and not simply of the skull itself? Having been led to a fixed conclusion that this was the case in reference to the development of the eye, the brain situated behind being developed in the case where the peculiarity referred to exists, he was led at once into a train of investigation which has produced the most notable results.

In addition to these facts, of which now numberless cases, illustrative, might be adduced, facts, of late years, have been accumulated to prove by *diseased* manifestations and by *diseased* changes, exhibited on examination after death, that such a part of the brain is connected with the power in question.

Such then was the mode of investigation adopted by Dr. Gall, and recognized by all phrenologists; a mode which, it is imagined, all will regard as simple, and as accordant with that system so much and so deservedly lauded in the present day, namely, the system of *induction*.

The existence of a large organ of language is indicated by the prominence of the eyes, also by a downward depression so that the under eyelid appears swollen. Mr. Combe* remarks "if the fibres, that is, of this organ be long, they push the eyes as far forward as the eyebrows, if they are only thick, they push them towards the outer angle of the orbit, and downwards."

In regard to the *functions* connected with the organ of Language it has been found that those who are endowed with this organ largely developed, have great power in learning words. They make good linguists so far as the learning of the words of a language are concerned. But it is quite evident, that, as words are mere arbitrary signs, signs agreed upon by society to represent certain things or ideas, and from this agreement deriving all their force, persons may learn an immense number of words without acquiring any real knowledge; that is when they do not understand the things

*In regard to Mr. Combe, the following quotation from Dr. Epps's Horæ Phrenologicæ will testify to the opinion entertained by the Essayist respecting Mr. C. "Indeed, no man seems to have arisen in this country, with the exception of Combe, who can be said at all to represent the departed genius either of Gall or Spurzheim.

or ideas, of what the words are the signs. They may pour forth words in torrents, and yet be nothing better than word utterers not sense declarers. And this, it is worthy of observation, is too frequently the case.

On the contrary, when the organ is small, the individual thus deficiently endowed has great natural difficulty in finding expression for his sentiments; a difficulty, the means of overcoming which, will be hereafter pointed out.

Having thus noticed the fact that there is a faculty for learning arbitrary signs or language, it seems natural to infer from the existence of languages, that is, *of masses of signs*, that there must have been objects of which these words are the signs. These therefore must be powers for the recognition of objects, or existences, individual bodies. The existence and the early activity of some power of this kind are exhibited by children, as soon as, yea, even before, they talk. "*What's* THIS?" is the inquiry, the constant inquiry, of the innocent little prattler. Now, what is the *this?* It is an individual existence, that the child is struck with; and, in the desire to communicate the impressions, produced by the object, seeks to ascertain the name or the sign by which it is known by those by whom he is surrounded. Grown up persons are inquirers, when any thing new is presented, "*What is* IT?" Now this "it" is some existence, some thing, of which they knew not the sign. But the thing existed before the inquiry could be made; and hence the truth becomes evident that words do not produce ideas: indeed that intellectual ideas are the effects of certain existences acting upon powers implanted by the Creator: and that words are the signs of these ideas called into existence by the objects acting upon the faculties given.

To exhibit still more strikingly the existence of a power, that appreciates individual existences, one fact may be recorded, that there are many individuals, who, from palsy, or other injuries to the brain, are unable to remember the *names* of things, and yet remember the things themselves. This could not be, unless there existed a power in the human mind which has the capability of recognizing the thing, the existence, independent of its name.

It has been long observed that this power of remembering individual existences is possessed in very different degrees by different individuals. Some men are extremely quick in obtaining information upon things: are quick in learning the details of the arts and of the sciences; and in society are regarded as brilliant. They have a superficial knowledge of almost all things, which, viewed philosophically, are appropriately designated by individual existences. Such individuals, Dr. Gall observed, have the middle or lower part of the forehead, situated immediately above the roof of the nose, largely developed; a form dependent upon the development of the anterior inferior part of the brain. This organ is called the organ of INDIVIDUALITY*, because taking note of individual existences.

---

* Marked $\frac{2}{19}$ in the bust.

This faculty corresponds to the noun in grammar: which, although usually defined as the name of a person, place, or thing, is defined phrenologically as the object of the organ noticed, which comprises in its embrace all individual existences: the name being a mere adjunct, the individual existing without a name, as well as with: a fact, having this practical bearing, namely, establishing the necessity of teaching children the individual existence, instead of pointing out merely the names of these existences.

Another fact, which must have impressed even the least diligent observer of intellectual character, is, that if several persons are asked to describe the same thing, each will notice different features in that individual existence: one will be struck with its colour; another with its form; a third with its size, and others with other properties or qualities belonging to the individual existence. Why should this happen? The common explanation is, each one was struck most by the property which he noticed. This does not satisfy the philosophical inquirer. He wants to know why one observer is affected most by this property, and another by that. He wishes to ascertain the peculiar constitution of mind, causing this difference in making observations regarding the same things. Phrenology gives the explanation, for phrenologists have discovered that all men have certain organs, connected with the faculties that perceive properties, and that as any one of these organs is developed in a greater degree so will be the tendency to have that organ called into a greater degree of activity: and the result of that activity will be the noticing those properties connected with the functions of the organs thus largely developed.

These organs are now therefore to be noticed. They take notice in their functions of the *properties* of bodies, corresponding to the Adjectives in Grammar; and they are situated along the brow, on each side of the organ of Individuality. Thus, the organ connected with the noun is placed in the centre, immediately above the root of the nose, and the organs of the perceptive powers, corresponding to the adjectives, by it on each side, thus supporting the noun, as the adjectives are linked in nature to the individual of whose properties they are signs.

The first adjective organ is that of Form.*

This organ is situated below and transversely at the side of individuality, the organ itself being placed behind the internal angle of the orbit, the convolution of brain constituting the organ lying on each side of the elevated part, seen on looking into a skull at the front, called the *crista galli*. It gives, when large, a great width between the eyes, and when much developed, pushes the eyeball toward the external angle of the socket outward and downward.

Dr. Gall was the first who was struck with the configuration noticed. He considered the function connected to be the *remem-*

---

* Marked No. 20.

bering of persons. But this, as Dr. Spurzheim has satisfactorily shown, is only in part *dependent upon this organ.* Dr. S. has established that this gives the power of *remembering forms.* Faces are forms, which individuals, in regard to the most noble part of the human body, present to observation, and some individuals have great power in remembering faces. In such, this organ is large. Dr. Spurzheim observes, that, according to the external configuration of the head of the Chinese, this part of the brain is much developed in them.

This organ, when large, must be of essential service to the mineralogist, the portrait-painter, the statuary, the geometrician, the milliner, the tailor, and all those who are engaged in pursuits which require an accurate knowledge of form.

In the bust of King George the Third this organ is large.

The existence and the situation of this organ are considered as fully established.

The second adjective organ is that of SIZE.*

This organ is situated *above* and *outside* the organ last described. It lies immediately outwards of the organ of individuality, at the inner and upper angle of the brow.

Dr. Spurzheim predicated the existence of this as a separate organ, distinct from the organ of form. He also intimated that it must be situated close to that organ. Later observations both by him and by others have established to a certain extent the existence of this organ.

Those individuals who have this organ large have great power in remembering the *size* of things. It is large in Brunel, in Toms the celebrated sculptor of Tam O'Shanter, who states that he never needs to measure in order to judge of size, or of proportion.

The distinction between a knowledge of form and of size is rendered evident by the fact that many persons have an accurate remembrance of the forms of things, though not of the sizes, and in them the organization is said to be correspondent, namely, a large organ of the one and a small organ of the other. It is evidenced also by another fact, that a body, which may be *round*, thus having relation to the organ of form, may be *large* or may be *small* appealing to another organ, namely, the organ of size. And, it is interesting to observe, that Dr. Spurzheim in predicating the existence of this organ was influenced by the metaphysically derived fact, that the idea of size and the idea of form are essentially different; and, in further predicating its locality, as being near to the organ of form, was influenced by another metaphysically derived fact, namely, the close connexion subsisting between form and size.

The frontal sinus existing often in the situation of this organ throws such barriers in the way of the observation of this organ that its existence is stated as *probable.*

---

* Marked No. 21.

The third adjective organ is that of Weight* *or* Force.

This organ is situated immediately outward of the organ of size, between the organ of size and a line passing through the centre of the brow.

Dr. Spurzheim predicated the existence of this organ.

It has been observed, that many men have great power in estimating the necessary degree of force essential to produce a given effect. Thus the bowler at a game of crickett has for his object the knocking down of the wicket. To effect this he must give a sufficient impetus to the ball so as to enable it to reach the wicket, and reach it in the direction so as to prevent the bat from meeting it. Some men excel in this. They do not know why, for they excel without much practice: whilst others with the greatest practice, do not succeed. The same is observed in quoits; the same in archery: the same in foundries where welding iron goes on. These men are found to have this part of the brow large and overhanging. Sir George Mackenzie and Mr. Simpson,† of Edinburgh, have paid great attention to this organ, not only in reference to its development, but also in reference to its functions. All celebrated engineers are endowed with this organ, Brunel has it large. Galloway has it large. Telford also. Sir Isaac Newton has it large.

The primitive power connected with this organ has not as yet been sufficiently eliminated from the facts accumulated. The circumstance that blind puppies will, if put on a table, not creep beyond the margin of the table, so as to fall, may throw some light upon this subject.

Some of the Manchester phrenologists, Mr. Edmondson, Mr. J. N. Rawson, Mr. George Wilson and others, consider that this organ communicates the power of perceiving a deviation from a perpendicular line.

It seems to enable man and animals to adapt their movements to the law of gravitation.

The last adjective organ is that of Colour.‡

This organ is situated at the middle of the brow, outside of the organ of weight. When fully developed, it gives a vaulted or arched character to the eye-brow. When imperfectly developed, as it is in Mr. Mylne's head, an indentation appears in this part of the brow.

It has been long observed that persons differ much in the power of perceiving, and also in the power of distinguishing, colours. Some can perceive only black and white. Dr. Spurzheim knew a family that were so affected. Some can perceive colours but cannot distinguish them: that is, the perception is so weak that the memory awakened by coloured objects is not sufficiently vivid as to enable the individual to perceive the differences between them

---

* Marked 22.

† See an interesting paper in a late number of the Phrenological Journal by Mr. Simpson.

‡ Marked No. 23.

so as to designate the colours by the proper names. Other persons, females in particular, have great power in perceiving and distinguishing colours. In them this part of the head is much developed: also in those painters, who have been famed as *colourists*. Mr. Mylne's history is strikingly illustrative of the want of this power of perceiving colours. This gentleman, who is now perhaps the first mechanical engineer in Scotland, was placed by his father in a trade, in which he was obliged to distinguish colours. He could not: and necessarily made the most egregious blunders, bringing one colour for another. His master believing this to be the effect either of inattention or of obstinacy, reproved him, and poor Milne's life was made miserable. It is reported that he ran away from his master. At length, however, he was allowed to pursue his natural bent, which always was to mechanics, and the result is now perceived in the elevation to which he has attained.

It was once thought that the perception of colour is dependent upon the eye. But this is now known not to be the case. Individuals with the best eyes have not an accurate perception of colours. And persons with the weakest eyes have the most accurate perception. The Essayist has a friend in Edinburgh, who has such weak eyes that he cannot see to read by candle-light, and yet he has the most accurate perception of colour.

Indeed, Gall and Spurzheim, in their progress of making observations on this organ, met with a bookseller at Augsburg, born blind, who maintained that it was not the eye but the intellect which recognizes colours, and asserted his ability to form a notion of the primitive colours.

Indeed there can be no doubt that the power of perceiving colours depends upon the development of this part of the brain.

Such are the perceptive powers. Such are the *head* adjectives.

This Essay may be concluded by a few practical remarks.

Practical Remark, 1.—It is quite evident from the remarks made on the organ of language that it is not right to punish boys who are not so quick as other boys in learning words. It is also not wise to encourage boys too much, who have a strong development of the organ of language, in learning words, as thus they will learn words without understanding their meaning: and thus will become *rapid talkers*, but not *rapid thinkers*.

These remarks teach, also, that when there is a deficiency in the organ of language, we should supply the deficiency by calling as many organs into activity as possible to aid the organ of language. This will lead us to seek to combine the teaching of words with the *things* of which the words are signs. Thus, suppose a child is taught to spell the word monkey, shew him a monkey: that is, viewed phrenologically, besides exercising his organ of language, exercise his individuality, his form, his size, his colour. Thus, four organs are brought to aid the organ of language. All *mnemonics* or means of improving the memory, are founded upon such aid: and the inefficiency of these systems, in many cases, arises from the professor making use, in all persons, of one organ to aid the memory.

Thus one teacher founds his system on the use of numbers: but a person, who has a small organ of number, (an organ hereafter to be noticed,) will rather be impeded than aided by such assistance.

Another method to aid the memory of words is to write the words down and to find out their derivation. This exercises every faculty, and hence the assistance derived.

Practical Remark, 2.—One fact, showing the evils which result from the too constant exercise of the organ of Language in educating it almost solely, is that, when palsy seizes an individual, the memory of words is the power generally lost; a circumstance, which the Essayist believes, is in a great measure, dependent upon the excessive exercise of this ill-fated organ in education. This organ is overworked. Weakness occurs, and, on the operation of any powerful agent, disease takes place; and the power of the organ is destroyed.

Practical Remark, 3.—As the organ of Form remembers forms, and as excellence of taste is dependant upon the nature of the form remembered, how essential is it that children should have none but the best forms placed before their view. The ugly images of former days are now banished, and the cheapness of works of plaster bids fair to elevate the taste of the rising generation.

It has often been a matter of astonishment with many how the Greeks attained the high excellence in taste which they manifested and which has rendered their works in the arts so very valuable. Their children saw the best forms, and seeing these best forms, an accurate taste would be induced, and at length the constant gratification of this taste would develop the organ; and it is curious that the form of nose, called, it is worthy of remark, the Grœcian, has as one of its constituents a full organ of form.

Practical Remark, 4.—The Essayist knew a founder, who, endowed with all the perceptive powers so large as to make his brow almost a deformity, was perpetually complainiug of his men, because, when working in iron, they used too much, or too little force. Had he known phrenology he would not have expected of men, who had not so full an organization of the organs as he had, the same tact. He must select men with similarly constituted foreheads.

Practical Remark, 5.—From the remarks on the organ of Colour, the absurdity of putting children to businesses when they have not the requisite faculties is quite apparent. The Essayist knew a tailor, who from a deficient organ of colour, frequently put the cloth that was to be inside the collar outside. His wife was obliged perpetually to direct him for fear of his making such and similar mistakes.

Practical Remark, 6.—The organ of colour existing shows that colours are given to afford pleasure; and that therefore any attempt to establish an uniformity of colour in reference to dress must be unnatural.

In the next Essay the Relative Faculties and their organs will be brought under consideration.

On Digestion. Essay IV.—*Practical Remarks on the Stomach. Old Adage after Dinner sit awhile. Cab Horses. Dyspepsia in America. The absurdity of a man being his own Physician.*

In the preceding Number a description, illustrated by a wood cut, of the stomach was given. Its arteries, veins, and nerves were noticed, and some other interesting circumstances stated. In the present Essay some practical remarks, arising out of the description given, will be contained. It will be well for the reader to peruse the account of the stomach in the last Number before examining these practical remarks.

Practical Remarks.—1. The necessity of little rest after a substantial meal, more particularly after dinner, is rendered apparent by the preceding remarks. The old adage is true, so far as the first part is concerned, namely, "After dinner sit a while." The reason is apparent. The stomach, in order to enable it to convert the food into chyme, calls the nervous energy to itself; this occasions the blood the flow to the stomach, and all the energies of existence are, as it were, concentrated in that one point. Now, if a person uses exercise immediately after eating, the nervous power is directed to the legs, is thus diverted from the stomach, and digestion is impeded.

The effects of rest and of the want of rest upon digestion have been strikingly exhibited by the well-known experiment on the two dogs. Two dogs were fed: one was taken coursing: the other was allowed to rest in his kennel. A few hours after the eating of the food, both were killed and cut open. In the stomach of the former, the food was undigested: in that of the latter, the food was changed into chyme.

Mr. Abernethy held the necessity of rest after meals so strongly, that it is said of him that he was in the habit of lying flat on his rug after dinner.

The Americans suffer very much from the exercise they take immediately after meals. The people (the whites) are almost invariably troubled with *dyspepsia*. To the cause stated this is in part to be referred, but still more to another habit, which prevails in America, namely, the swallowing the food without properly masticating it.

Another fact connected with this may be stated. The writer of this Essay has a friend, a schoolmaster, who, in the holidays, takes walking tours, averaging 40 miles a day. He takes a comfortable breakfast in the morning; no dinner, except one pennyworth of gingerbread. When he arrives at his journey's end, he has a most substantial meal. Did he take that meal in the middle of the day he could not walk.

Again, it is well known that cab-horses that get their food by

snatches become very lean:* and this no doubt is in part connected with the imperfect digestion, which arises from being called to work when they have hardly swallowed their food.

2. Another practical deduction from the preceding statement is, that, as the conversion of food into chyme is in part connected with the motion of the stomach, dependent upon its muscular coat contracting; *sedentary occupations*, especially writing at a desk, must impede the powers of digestion. This will explain in part the peculiar character of countenance which sedentary people present. The injuries arising from this source will be more fully explained, when the function of the INTESTINES is examined.

3. Another practical deduction is that the gastric juice does not act upon raw flesh and unbruised seeds.† Infants should have soft food: also old people, who have lost their teeth: and that others endowed with teeth should use them diligently in bringing the food into that condition, in which the gastric juice can readily act upon it.

4. Another practical deduction from the description of the stomach is the danger of a blow upon the stomach, while the food is undergoing digestion. All the powers of life are as it were concentrated at that particular point: a blow during this concentration must give a very severe shock to the system: indeed, death has often resulted from blows given under such circumstances.

Another practical deduction from the preceding statement, that every thing may become food to an individual if he possesses a stomach that is enabled, by the aid of the gastric juice, to convert that which is taken into chyme. Whatever can be converted into chyme is food. Stomachs differ much in this respect: and a man, who does know the capabilities of his stomach by the age of forty, must be a fool: thus illustrating the old adage; that "A man, who, at forty, is not his own physician, is a fool." The other illustration of this adage, though commonly brought forward, is not true: namely, that a man can be his own physician in reference to the *medicines* he ought to take for his *diseases*. This cannot be. He may and ought to know what will suit his *stomach:* but he requires much more study than he has time to follow out to become acquainted with the nature of his diseases, and with the remedies suited thereto.

---

* A friend, Mr. Hawkins, travelled in America on horseback a journey of 2000 miles. The horse he used when he started was lean; when he returned was fat. The plan Mr. H. adopted with his horse was to give him 10 quarts of oats, as much hay and water as the horse pleased to take at night: but to take him out of the stable in the morning without having any food: to go a stage of 10 to 15 miles: then to give 2 quarts of oats, a very little hay and a very little water. Then to go another stage and give him the same; and then to go another stage, and then to give him his evening portion. The horse was allowed an hour's rest at each feeding. And this horse, as was remarked, went out lean and returned home fat.

† The necessity of the bruising or grinding of seeds is exhibited in the structure of the gizzards of birds, which are a kind of mill in which the grains are placed to be ground, as the birds may require a supply. To aid this process it is well known that birds swallow stones: and in the gizzard of the ostrich, nails, shells, sharp pieces of glass, and other rather extraordinary visitors have been found. Several vessels full may be seen in the Museum of the College of Surgeons.

The following few Reflections were suggested by reading the "Extract of a Letter from an Artist," in the Number for October.

Graceful and beautiful in both sexes, is that strength of soul, and self-possession, which teaches us to endure suffering with patience and magnanimity And sublime indeed is that power of conscience, that mandate of the Deity, which impels us to beautify and enrich our minds and hearts, in order that we may fulfil our destiny of ministering to the good and happiness of our fellow-beings. Dazzling is the light of genius, and magnificent as the splendour of the rising sun are the creations of fancy; but brighter than jewels, lovelier and purer than moonlight, grander than the proud tossing of the ocean, is the victory of the human mind over its passions and prejudices. Oh, that I had the tongue of a seraph, and a voice like Apollo's lute. Oh, that the thoughts that glow within could flash forth like the lightning! then would I strive to make known my ideas of the glorious might of the soul: but as it is, I live,

"But live unheard,
With voiceless thought, threat'ning it as a sword."

And yet—oh yet—by all those lofty aspirations after perfection, by all the melting tenderness that steals over me at the unfolding of beauty in any shape, by the dancing of my heart to the song of liberty, by the emotion that thrills throughout my frame at the recital of gallant and generous deeds; I perceive that I am capable of feeling powerfully and deeply all things that are just and true and lovely. And joyfully do I prepare to tread every unknown region, whether it be bright or gloomy, to which my wandering footsteps may be led in my journey through existence: knowing that in every path, aye, even in the most rugged, flowers may be gathered, and that garlands may be twined in the darkest hours, whose emitted sweets may shed balm upon the spirit. And in those unexplored paths Hope commands me to summon many bright and awful sprites around me, who are willing to teach the fearless the mysteries of nature, and the secrets of the human heart. In those future hours to which my spirit points, I may, perchance, win and wear that radiant talisman for which I pine—the power of persuading all beings to rejoice with me, at the festival of life, to smile on each other, and to speak with gladness of the overflowing blessedness of God's creation. Ah! surely it would be thus with every one if, instead of

"Gazing upon the ground with thoughts that dare not glow,"

we were to expand the pinions of our soul, and soar into the Heaven of Heavens to contemplate the brightness of our Father's glory, and the dove-like sweetness of his Son. Did we do this with the boldness of immortals, and the constancy of pure and spiritual

love, we should learn to rejoice ourselves, even with "a spirit's transport," and to diffuse around us the light and love, forming the essence of holiness.

Truly it is the duty of men and women to imitate the conduct of Jesus of Nazareth, "who went about doing good;" and it is a cowardly shrinking from that duty to sit with folded hands and upgazing eyes, dreaming that thus they are serving God. But, thanks to him, his truth is spreading through the world, and mankind in general are learning to think, and to act; so that we may allow ourselves to trust that the reign of justice and of reason is approaching. Yes, truth is mighty, and must prevail.

SPERANZA.

APPLICATIONS OF PHRENOLOGY.

Mr. Editor,

As your valuable Magazine is intended for the benefit of man—to remedy him from his three-fold diseases—I solicit the favour of a description of the external signs of that head which is calculated for a "Civil Engineer." In your lectures on phrenology, last May, you said it was the *duty* of all parents to consult phrenologists upon the construction of the children's heads, in order to select that business for which their organic forms are best adapted.

I conclude my first Letter to the Anthropological Magazine by stating, that it has, in my humble opinion, hitherto answered its intended design; and as long as it continues so, will not fail to have my feeble support.

I am, Mr. Editor,

AN INQUIRER AFTER TRUTH.

[Our Correspondent will find an answer, in part, to his inquiry in the present Number, and a more complete reply in the next.—Editor.]

EDUCATION THE CAUSE OF DISCONTENT.

You hear people continually talking against educating the poor, because education makes them discontented with the situations in which they are. Granted: but what does this prove? What but this, that a desire to increase and to attain a certain height is the characteristic of human natnre, and surely is there more harm in a poor man wishing to exalt himself than in a rich man making the same attempt. The persons who make the complaint are generally individuals who are pushing themselves into notice, or having attained notice, do not wish others to share with them. The language of every generous philosophic heart should be, "Down with monopolies of rank, wealth, science, and comforts."—J. E.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

JANUARY 1, 1836.

DROWNING AT SEA SOCIETY.—DISOBEDIENCE AND MISERY—OBEDIENCE AND HAPPINESS.

Essay II.

In the Essay in the preceding Number on the above subject, the attempt was made to prove; 1st. *That ships are built with the expectation that they will sink;* 2nd. *That it is the interest of ship-builders not to build strong ships;* and 3rd. *That it is the interest of ship-owners, under the present system, that ships should sink.*

In establishing the third proposition, three motives were stated why the ship-owners should prefer a weak ship, that will sink, to a strong ship, that will float: The first was, that he can earn as much by the weak vessel as by the strong, and consequently saves the difference in price, and also the interest of the difference on the capital invested in purchasing a strong ship and a weak ship: The second, that, in insuring the one, namely the weak, he has to pay less insurance money, because he has less to insure, than he would have to pay to insure the strong vessel, costing him nearly as much again: And the third was, that as he gets only *two-thirds* of the insurance money when the ship is *injured*, but the *whole* when the ship *goes to pieces*, it is his interest to have a weak ship, which, on going ashore, will go to pieces, rather than a strong, which will only be damaged.

In this Essay, a fourth motive why the ship-owner should prefer a weak ship, will be deduced from some facts connected with *marine insurance.*

In order that these facts may be understood, not only as separate facts, but also as bearing upon the subject under investigation, a part of the preamble of the Act, establishing Marine Insurance, namely, statute 43, Elizabeth, c. 12, may be recorded: "By means of policies of insurance, it cometh to pass, upon the loss or perishing of any ship, there followeth not the undoing of any man: but the loss lighteth rather *easily upon many*, than *heavily upon few:* and rather on them that adventure not, than those that do adventure: whereby all merchants, especially of the younger sort, are allowed to venture more willingly and more freely."

This extract most clearly points out how marine insurance acts

namely, by MAKING THE PUBLIC PAY THE LOSSES OF INDIVIDUALS. This would not be so much minded if the losses of individuals did not depend principally upon the negligence of these individuals. Charity would make us aid persons in distress: but the law of maritime insurance makes the public pay for the bad success connected with the gambling of ship-owners and others.

The persons, who effect the marine insurances called policies of insurance, are, as was already stated, styled *underwriters*. The interest of these men is to get a good price for what they do. The goodness of price, it is evident, will be equal to the risk, supposed or real, which they incur. Now, if ships were to be built strong, there would be little or no risk. This, it is quite evident, would not therefore suit their views. And, as it is further evident, that if these underwriters do not receive more by premiums than they pay for ships lost, they would be ruined, it follows, that they must, by some means or other, make their premiums more productive than their losses are destructive. Their object therefore is to diminish rather than to increase sea risk, because they thus increase their premiums.

To effect this they did not dare to say you shall make ships so that they will sink: but we will take care, that, *however strong the ships are made*, they shall, after a certain *period of years*, be put upon a *list*, all upon which require, as being hazardous, a larger premium. The list was two-fold; and may be called *A.* and *B.* All ships that were new and constructed in some particular places were classed in list A: after about ten years' service, they were placed in list B, and became hazardous ships: or what is perhaps more true, ships, that, for their insurance, *required a larger premium.*

Directly a ship is put in list B, the *premium of insurance rises*, because there is greater risk. But, is it not evident that a strong built ship will be attended with less risk at twenty years old than a weak built vessel at nine years old? This the underwriters did not care for.* Their object was premium: and premium they would have. The ship-owner, seeing, that his ships would be transferred to list B after a period of years, and that then he should be obliged to pay an increased premium, concluded, What use is it that I should have a strong ship, that will be good twenty years hence, since, it will in ten years, be placed in list B, indicating that it is not good? He, therefore, purchased a weak ship: his conscience, no doubt, reproving him, but, at last, finding that he could realize as much *pecuniary* profit (putting aside the sinking of human beings; that was nothing!) from the floating sieve as from the staunch vessel, conscience was soon calmed: and impudent waxed-fattedness at last actually had the boldness to refer the losses, whenever they occurred, to the visitation of Providence.

---

* A modification in the classification has been adopted by Lloyd's Society; to an extent comparatively trifling, as will be shown in a succeeding Number.

Thus a fourth motive why a ship-owner should purchase a weak vessel becomes apparent.

But it may be urged, *Why not have a strong ship and laugh at the underwriters.*

The answer is clear. A *ship* carries *persons* and *goods*. A merchant cannot insure a safe delivery of *persons*, but he can insure a *safe delivery of goods*, or the value to be given him. He wants to send some goods, £1000. worth, to South America. He has a friend who has a ship, going to that part. He knows that the ship is a good one: but for certainty sake he thinks he must insure his goods. To Lloyd's he goes and states that he wishes to insure. The ship's name is given. It is found in list B, and besides it is not insured. Now the ship may be better than thousands in list A, because stronger built; but this matters not. The premium of insurance is higher, and the merchant will not pay the difference for friendship's sake, and the ship loses that portion of its cargo.

The proscription list meets the honest ship-owner wherever he turns. He cannot get a freight: and he is obliged to send to sea the next vessel he buys, an inferior vessel. "His only alternative," observes Mr. Ballingall, "is to follow the example of others, that is, to withhold repairs and supplies from her: to keep her insured to the full value: let her be lost: and get paid for her by the public, through the agency of underwriters."

So that it is evident, first, that the interest of the ship-owner is to have a weak vessel rather than a strong: second, that a honest man, determined to have a strong ship, is not allowed to be honest, but is obliged, that is, if he continues to be a ship-owner, to have recourse to weak vessels, in which to carry on his occupation.

One man cannot resist the power used against him. A company can: hence the Scotch Smack Companies do not insure their ships. They build them strong: and they can command from their influence a freight: and it is generally imagined that the principal part of the profits of these companies is derived from the saving effected by their system of not insuring.

Taking a view, then, of the mode upon which ships are built; of the slight protection of three inches of timber between the depths of the ocean and the individuals floating thereon; of the immense loss of ships, *three in every two days;* of the system of insurance and its operation upon the ship-builder, the ship-owner, and the merchant, the conclusion, it appears to the Essayist, *must* be arrived at, namely, that the whole is one mass of abomination, and calls loudly for alteration.

But it may be urged, surely, if such a mighty abomination existed, government would interfere. Surely a paternal government would watch over the interests of the country so as to prevent this destruction of human life and property.

Many people seem to have a most mysterious notion of government. They appear to regard it as a kind of personage that has the most wonderful powers, and the most heavenly-minded will. Whereas governments, in most cases, are merely one, two, three,

four, up to twenty or thirty respectable gentlemen who live comfortably upon the spoils of the millions, which spoils they receive for taking care of the affairs of the millions. The great object of governments is to ascertain how much money they can draw from the pockets of the people: which money, to deceive the people, they call *revenue*. If any thing, however vicious it be, brings in revenue, government recognizes it. In France, in Russia, and other European countries, brothels are licensed and have to pay so much a year to government for their licenses. In this country, lotteries used to be licensed: and, even now, the government of the country has the hardihood to persevere in saying, that, by a system of corn laws, we will make dear what God has made cheap: and why, because we get or think we get revenue therefrom.

The same strong motive for government keeping up the system, of marine insurance, just noticed, exists: the truths of which will be manifest in the consideration of the 4th Proposition, THAT SHIPS, THUS BUILT TO DROWN PEOPLE, AFFORD A CONSIDERABLE REVENUE TO GOVERNMENT.

The revenue of most governments is derived, in a great measure, from *taxes* upon *articles of consumption*, commonly called *excise duties*. In this country there are other sources, through which the money of the public passes into the coffers of the government treasury. One of the most lucrative is that which is known under the title of *stamp duties*.

Now, it is quite apparent, that the *greater the consumption* of articles subject to excise, the greater will be *the revenue* derived.

Ships are made according to the necessity existing for goods and for persons being brought to or carried from any particular country: in other words, the number of ships corresponds to the supply necessary to be conveyed to or from the country.

If, therefore, out of 700 ships, 100 go to the bottom, it is clear, that 100 more ships will be made to supply the necessary amount of *conveyance room*, called technically *tonnage*. Now, these 100 ships will require in their construction *timber*. This timber is taxed: in other words, all timber, coming from foreign parts, has to pay *duties*, called *timber duties;* and, therefore, according to the quantity of foreign timber, employed in making the 100 ships, will be the revenue of the government thence derived.

But besides timber, much *cordage* and canvass are made use of. Now this cordage and canvass are made from *hemp;* and this hemp is brought principally from foreign parts, and has to pay duty on its arrival. As there will be an increased consumption of this hemp, in order to supply the place of the cordage and canvass of the 100 ships lost, by a hundred ships built, the government hence derives a considerable revenue.

Again, *iron*, *copper*, *pitch*, *tar*, are employed in the construction of these ships, and, according to the consumption of these, so will be the increase of the revenue to the governments.

But ships are obliged to have many other additions, which enable the stamp duties to extend their money-sucking powers over the unfortunate public, who pay for all these things. There are *char-*

ters of affreightment, *bills of lading*, *policies of insurance*, *arbitration bonds*, *protests*, *seamen's articles of agreement*. *apprentices' indentures*, all of which come more or less under the control of the stamp duties. And as every new ship requires these, it is evident, that from the 100 ships required by the sinking of the previous hundred, the government realizes a very considerable revenue in reference even to these items.

And finally, when, it is remembered, that the *imports* and the *exports*, contained in these ships, are lost, it will be clear, as there will be the same need for these exports and imports, the articles themselves will rise in price on account of this drawback on the whole amount; and thus the public, in the increased price of the articles, has to pay for the losses sustained. And when fresh imports and exports take place, on account of this rise in price, the government receive their duties, and thus derive their revenue from the losses of others.

So that it may be truly said, that the government obtain wealth from the misery and increased expences of others.

But the point in which the government is directly interested in perpetuating the system of marine insurance, is in the circumstance that an immense amount is derived from the *government duty* on all insurances.

To expect government therefore to interfere in these matters is to expect to gather grapes of thorns: is to expect the Æthiopian to change his skin, and the leopard his spots. The only way by which relief can be afforded is by the effect produced upon the public by the diffusion of information upon the subject.

Government will let its supporters sink as long as any thing is gained by it. It is therefore the duty of every individual to use his energies in enforcing the necessity, of attending to the means to be devised to prevent this destruction of human life, upon his representative in Parliament.

There might be some excuse for having ships so constructed, if ships could not be built better: But this is not the case. Every science has progressed: and have not the principles of ship-building? Every art has progressed, and has not the art of ship-building?

In order to demonstrate that ship-building has advanced, and thereby to remove the only excuse for such floating sieves being sent upon the waters, the fifth proposition, namely, THAT SHIPS CAN BE BUILT SO THAT IT WOULD BE IMPOSSIBLE THAT THEY COULD SINK, WILL BE BROUGHT UNDER CONSIDERATION in the next Number: in which also, an attempt will be made to disabuse the mind of some erroneous views, as connected with the agency of a particular Providence, (in which be it remembered the Essayist has the strongest belief), in reference to this matter of drowning at sea: views, false in their origin, injurious in their tendencies, and derogatory to the Deity in their results.

CHARACTER AND CONSISTENCY OF THE CHRISTIAN PHYSICIAN.

Mr. Editor,

In offering the following strictures on the communications of two of your Correspondents in your November Number, I am actuated only by a regard for the character and consistency of your periodical.

The title, *Christian Physician*, imports that your design is to promote and improve the health of the community, which, in your prospectus, is arranged in three divisions—physical, moral, religious HEALTH. The physician will be solicitous to prescribe the remedies most likely to restore the health of his patient; and, if the disease is beyond his skill, or the power of medicine, then he will administer such anodynes as will at least do the patient "no harm." It therefore behoves the *Christian* Physician, especially, when he prescribes for the whole community, to act upon this safe principle.

The *Christian Physician* will, I presume, endeavour to accomplish its object through the medium of public opinion. Here is a wide field for the exercise of talent. Much error exists in the several branches of that opinion; and great caution, labour, and perseverance will be required for its removal. You enter on a warfare with ignorance, prejudice, and self-interest, the old and inveterate foes of all improvement, which cannot fail to derive strength from any inconsistency which may appear in your mode of advocacy or procedure. Your success will be viewed with jealousy —your operations will be surveyed with a lynx eye—and every endeavour will be made to thwart your innovations. When, therefore, you are about to attempt an important operation—if it be the cutting off a right hand, or the plucking out a right eye—much sympathy and tenderness towards your patient will be necessary, until the operation can be accomplished; or if you administer a strong pill, its bitter and nauseous qualities must be rendered as palatable as possible, lest the patient reject it altogether. In short, the sovereign remedy for the diseases you aim to cure must be the TRUTH, *spoken in love.*

By these reflections I have been somewhat aroused from my native indolence and obscurity to direct your attention to the sentiments of your Correspondent, "J. D., a Subscriber," on

"MORAL LAW."

He says, "Moral law is not universal and fixed, but local and changeable; for the moral law of one portion of mankind is different from that of another." But J. D. has committed a gross oversight in risking this assertion. It is by no means an axiom in morals that "moral law is not universal and fixed, but local and changeable.." J. D. should not, therefore, have taken that for granted

which ought to have been proved; and his proofs should have been of a more satisfactory kind than those he has offered.

He says, "the moral law of the Hindoos sanctions public self-murder." One would naturally think that your Correspondent in using the term "*moral law*" was not aware of its import. It is *not* the *moral law* of the Hindoos which permits and applauds the burning of widows on the funeral pile of their husbands, or that sanctions the votaries of Juggernaut in throwing themselves under the wheels of his ponderous car, that they may be crushed to death, but the ignorant and degrading superstition to which they are subject. And what, but the ignorant superstition, fraud, and fanaticism of the Catholics and Protestants sanctioned their mutual extirpation? The same principle which forbids such conduct now, forbade it in the man who first imbrued his hands in the blood of his brother; and, from the days of Cain downwards, the same principle of "moral law" has forbid all such wickedness. It *may be* "moral law" that "forbids swearing and fighting to the quaker;" but what directs the cut of his coat, or causes him to refuse to pay tithes and to support a hireling ministry? It is his *religious opinion.*

Is it *moral law* that leads the New Zealander to riot in human flesh, or that teaches the Arabs to live by robbery and plunder? Is it agreeable to *moral law* that a portion of the human race, because their skins are of a different colour, should be stolen from their native regions—transported to distant shores—and bought and sold as cattle, separating the husband from his wife, and the mother from her children, thus outraging every principle and feeling of humanity? And yet this traffic in human flesh, blood and bones, with the "wholesale enormities" by which it was attended, *was* sanctioned by the British Government, whose "moral law" J. D. will surely not put on a level with that of the Hindoos. This infamous trade is still carried on in America (the land of liberty ! ! !) accompanied with details of cruelty, oppression, and murder "at which we shudder?"—nay, from which the mind of every free-born Englishman recoils with indignation at the baseness of those who can thus, in violation of the law of God, which constitutes all men free, hold a large number of their fellow-creatures in hopeless servitude, excluded *by law* from the privileges of education and religion, as if they were endowed with no higher principle of being than the brute creation—as if they had no soul. J. D. will perhaps tell us that they have no soul is the "*moral law*" of America."

J. D. says, in his postscript, "I believe that the moral law of a man, or of a portion of mankind, depends entirely on his or its intellectual or physical condition. If the physical and intellectual condition are perfect, then the morality will be perfect, and *vice versa.*" By this I suppose he means that if the physical and intellectual condition were perfect, then mankind would be better able to discharge the duties they owe to one another. Of this there can be no doubt, if we only compare the semi-barbarous nations of the east with their more civilized and enlightened neigh-

bours of the west. But it is, in common phrase, putting the cart before the horse, to dignify the oppressive, treacherous, and sanguinary conduct "of a man or of a portion of mankind," with the title of "moral law."

There is evidently a confounding of all distinctions in the letter of your Correspondent. He calls that "moral law" which consists only of the absurd tenets of a religion, in many cases the offspring of ignorance, superstition and fraud, sanctioning licentiousness and crime for the sake of emolument. And, again, he calls that "the moral law of a man or of a portion of mankind," which is neither more nor less than his or their *immoral* and *lawless* conduct. As well might he call the superstition of the Hindoos the religion of the Bible; or the rich, and powerful, and dignified, and ambitious, semi-political religious establishment of this country, a fair representation of the kingdom of Christ, who declared, "My kingdom is not of this world."

And *you* say, Mr. Editor, "Perhaps 'moral law' is defined correctly as local, temporary, personal." I agree that the last of these "appellations" is applicable to "moral law," which has reference to *personal* conduct, but I cannot consider "moral law" as either local or temporary, but *universal*, *unchangeable*, and *eternal*. Your distinction between "moral law" and "*the* moral law," to which latter you conceive "these appellatives cannot be applied," does not appear to me to imply a difference. "*The* MORAL LAW" IS THE SUMMARY GIVEN BY THE CREATOR TO HIS INTELLIGENT CREATURES OF THE DUTIES THEY OWE TO HIM AND TO THEIR FELLOW-MEN;—"MORAL LAW" IS THE PRINCIPLE ON WHICH THESE DUTIES ARE FOUNDED. So that the relation of "*the* moral law" to "moral law," is similar to that of a house to its foundation. The foundation is not the house; but without the foundation the house could not stand. (See Matt. vii. 24—27.) If the principle of "moral law" be not universal, unchangeable, and eternal, I know not by what rule of logic it can be shown that "*the* moral law" possesses these attributes.

I question the propriety of the CHRISTIAN *Physician* vending the poison contained in J. D.'s code of morality, even if it had been labelled "poison," and had had the antidote by its side.*

The subject of "SPIRITUAL INTELLIGENCES," next solicits attention.

Your Correspondent "Libra," in his remarks on the compatibility of a particular providence with the fixedness of the laws of

---

* The great advantage of publishing views, which may be considered and are erroneous, cannot be exhibited better than in the circumstance that the communication referred to, has occasioned the production of the, present paper. We are quite convinced that the boldness of many advocates of error is dependent upon the unwillingness of the advocates of truth to grapple with their errors.—EDITOR.

nature says,—"Much of this providential administration is doubtless effected through the instrumentality of spiritual intelligences, who are sent forth to be ministering spirits to them who shall be heirs of salvation." Reference is here made to Heb. i. 14; and I am aware that the general opinion of Christians, critics, and commentators, does sustain this application of the passage. But, differing from the general opinion upon the subject, I have not hesitated to avow it, and I trust the avowal will be regarded as an indication of a desire to ascertain THE TRUTH.

There cannot be a doubt of the existence of those spiritual intelligences spoken of—that they dwell in the presence of God, and execute his commands; but how far, according to the Romish doctrine of "guardian angels," they are occupied in visits to this earth, or in superintending the affairs of men, the Scriptures do not enable us to determine, and they are the only source of correct information on such subjects. It is, however, certain that in many places where angels are spoken of in the Bible, it is not spiritual intelligences who are meant, *but men whom God has employed as his messengers.* The word angel is a Greek word, which has not been translated; and its application is not confined to spiritual intelligences, although it is almost invariably used in the English language to denote only such. If the original word, instead of being put into an *English form*, had been translated, and the word "*messenger*" used throughout the Scriptures, no ambiguity could have occurred, because the context would have shown when it applied to spiritual intelligences and when to men.

In the passage in question, Heb. i. 14., the reference is to the *prophets.* The whole of the epistle is a contrast between the Mosaic dispensation and the gospel. This contrast begins with the superiority of Jesus to Moses and the prophets, chap. i. 1, "God who at sundry times and in divers manners spake in times past unto the fathers by the PROPHETS, hath in these last days spoken unto us by his SON." The comparison proceeds; and if the word *messenger* is substituted for that of angel throughout the chapter, its application to the prophets will be quite apparent. At verse 13, the apostle concludes—"But to which of the angels [messengers] said he, at any time, sit thou on my right hand until I make thine enemies thy footstool? Are they not all ministering spirits sent forth to minister unto them who shall be heirs of salvation?

The term minister means one who serves; it is uniformly applied in these times to those who (profess to—Ed.) preach the gospel; and the phrase "ministry of the word," is of common use and acceptation. God spake unto the fathers in times past *by* the prophets. He did not speak unto all Israel, as a man speaketh to his friend; he made known his will to his servants the prophets, and they ministered the word to the people:—they were "ministering spirits sent forth to minister to them who shall be heirs of salvation."

In applying this passage to the administration of a particular providence, the persons spoken of—"who shall be heirs of salvation,"—have been overlooked. The doctrine of God's providence

respects all men. (And some may be ready to imagine with Aseph, Psalm lxxiii. 14, that the wicked were more favourably dealt with in the arrangement of providence than God's own people. "Behold, they are the ungodly, who prosper in the world; they increase in riches.") God in his providence watches over and preserves his people, and punishes the wicked. I shall apprehend, then, that if the angels are employed in the one case to preserve, so, in the other, that they are employed to punish, as in the case of the Assyrian army (2 Kings xix. 35,) and many others. But according to Heb. i. 14, the angels are "ALL ministering spirits sent forth to MINISTER TO THEM WHO SHALL BE HEIRS OF SALVATION."

For these reasons, I believe that the "ministering spirits" spoken of in this passage,—from the drift of the apostle's argument and from the nature of their ministration,—are the prophets of the Mosaic dispensation; and that, therefore, the passage is incorrectly quoted in connexion with the doctrine of a particular providence, in which doctrine I fully concur.

In conclusion, I beg to remark, that it becomes those who are in search of TRUTH not to be frightened by prejudice, nor scared in their progress by the opinions of others, however long established.

PHILO VERITAS.

Nov. 5, 1835.

NATIONAL CHURCH NOT A CORRECT PHRASE.

A National Church, in strict propriety of speech, means a church consisting of the entire nation. The theory on which all such institutions are formed, is that the religious community in any country is co-extensive with the political. Obviously, therefore, in a country like this, where toleration is law, and a numerous body of dissenters exists, the designation "national church" is a very incorrect mode of expression, if it be not a *contradiction in terms.*

PROTESTANT ASCENDANCY IN IRELAND, DEFINED BY THE CELEBRATED CURRAN.

I will respect and revere the man who employs himself in diffusing light, hope, and consolation. But if you mean by ascendancy the power of persecution, I detest and abhor it. If you mean the ascendancy of an English school over an Irish university, I cannot look upon it without aversion. An ascendancy of that form raises to my mind a little greasy emblem of stall-fed theology, imported from some foreign land, with the graces of a lady's maid, the dignity of a side-table, the temperance of a larder; its sobriety the dregs of a patron's bottle, and its wisdom the dregs of a patron's understanding, brought hither to devour, to degrade, and to defame.—*Speech on Catholic Emancipation in the Irish House of Commons. Oct.* 17*th*, 1796.

PHRENOLOGY, BY JOHN EPPS, M. D.

Essay IV.

In the last Essay, that division of the intellectual faculties, known under the name of perceptive, was considered. In the present Essay, the second division, consisting of the *relative powers*, will be examined.

These faculties are called relative, because, the *existence* and the *properties* of the existence, having been ascertained by the perceptive powers, the next step is to ascertain the *relation* in which these individual existences and their properties are placed in reference to other individual existences.

Thus, every individual existence has a *state* in which it exists or manifests itself. The individual existence can be viewed simply as an existence, which is known, as was noticed, by the term *noun:* or it may be viewed in a state of *action* or *rest*, or being *acted upon*, which is expressed by the part of speech, called the *verb*.

It is quite evident, when an individual existence is viewed in relation to any action or state of being, in which it is, that, then there must be, in the recognition of the state of action or state of being, a power of mind, different from that which recognizes the individual existence simply. This state of things, having relation to the condition of the existence, is called an *event*. Thus, the word "horse" is the name of an animal, an individual existence, having a particular form: but, if the horse puts one leg before the other *slowly*, such state, relative to the action of the horse, is defined by the phrase "walks:" and whilst the expression "horse" does not indicate an event, the phrase "the horse walks" does indicate an event. It is further found that some individuals have a most powerful memory of events, and, in them, it was observed, that a particular part of the forehead* was largely developed.

The part of the brain situated behind this part, and constituting, when developed, the fulness of the forehead in this particular direction, is called the organ of Eventuality. This organ, it will be seen, is situated in the centre of the forehead; so that, if a straight line be drawn from the root of the nose, perpendicularly upwards, individuality will be the first, and eventuality the second in order.

In the busts of Pitt this organ is represented large, and his intellectual power depended principally upon the activity of this faculty. He was a man who had *no breadth of mind*. He had great readiness, and this, by many, was mistaken for depth. It is related of

---

* Marked $\frac{1}{19}$

him, that, when he introduced the tax upon watches, he sent for two or three of the most clever watch-makers, and required them to describe the parts of a watch, and the art of watch-making. He went to the House, and gave a most succinct, accurate, and interesting history of watch-making, and of the individual parts of the machine itself, and astonished the House by the wonderful extent of his knowledge. But this was not depth of mind; it was the result of his eventuality. It is curious, therefore, to observe that the power which he manifested most, was that, which, in his busts, made without any reference to Phrenology, is exhibited most strongly developed.

This organ is large in those who can give a narrative of events: and the organ is found very large in the busts of Sir Walter Scott, whose power at narration no one doubts.

The next relative organ is that of Locality.*

This organ is situated on each side of the organ of individuality; it lies rather obliquely outwards.

The discovery of this organ was made by Dr. Gall.

Gall found that he could not readily find places where he had been, or where he wished to go. A schoolfellow had the greatest power in this respect. Gall moulded the head of this friend, Scheidler, and he distinguished "at the eyebrows, toward the middle line of the forehead, a protuberance on each side, which reached to the middle of the forehead." By this Gall's attention was arrested, and, after collecting a vast variety of corresponding development and manifestation, more particularly as exhibited in the desire to see places, to travel, he became convinced of the existence of this organ.

It is interesting to observe, that this part is represented large in the pictures and the busts of great astronomers, navigators, and geographers. Newton, Columbus, exhibit this organ large. In Captain Cook, his biographer states, that the frontal sinuses were extremely prominent, which appearance was, no doubt, dependent upon this organ being largely developed.

This seems to be essential to the landscape painter. It gives the power of remembering places.

Dr. Spurzheim considered it to be the organ of *space*.

The relation it bears to the action or state of being of the individual existence, is that in which the adverb of place stands to the verb. Thus, every action or state of being of any individual existence must take place in space; and the particular point in space where such action or state of being takes place answers to the adverb *where?*

But every action or state of being takes place not only in space, but also in *time*, and to express this modification of the action or state of being, of which the verb is the sign, there are adverbs of

---

* Marked No. 24.

time, in the same manner as there are adverbs of *place*, to express the modification of the action or the state in reference to space.

The Creator, it may be inferred, would therefore endow the human being with power to observe this modification; and, as it is found, that power is associated with organization, the inference seems justified that an organ of time would be one of the gifts of the creative wisdom.

Such is the case, and

The next relative organ is that of TIME.*

This organ is situated outside of the organ of eventuality, and just above that of locality. In fact, locality seems in part to separate this from the organ of eventuality.

Some persons have a very accurate knowledge of time and "of intervals in general." Many persons can tell what hour it is, and seldom make mistakes. Some individuals sing in time and dance in time. Others cannot do either: and, while, in the former, the particular part, called the organ of time, is largely developed, in the latter, there is often an indentation in this particular part.

Many men have poetic minds, but cannot express their thoughts in verse. They have this organ imperfectly developed.

This organ, in its activity, seems to respond to the adverb *when?*

The next relative organ is that of TUNE.†

Passing outwards from the organ of time, the organ situated next is that of tune. A great development of this organ makes the central lateral parts of the forehead to be enlarged. If a line be drawn from the outer angle of the eye perpendicular to the middle of the forehead it will rest on this organ.

In Handel, Haydon, Mozart, Viotti, this organ is large.

The other relative organs seem to be more intimately connected with the eyes: this more intimately connected with the ears. Individuals, who have this organ large, have an accurate memory and perception of tones; and thus a power is gained of perceiving the harmonies of sounds.

Singing birds may be distinguished from birds that do not sing by the fulness in this part of the head.

This organ is considered to be established: though it is often difficult to observe it.‡

The next relative organ is that of ORDER.§

This organ is situated immediately below tune, being the organ

---

* Marked No. 26.

† Marked No. 28.

‡ Mr. Hawkins stated he had experienced considerable difficulty in ascertaining the locality of the organ of tune until, on one occasion, he attended an Oratorio at one of the Theatres: on looking round upon the various individuals present, who had been brought together principally by the music, he at once saw such numerous illustrations of the organ of tune, that he ever afterwards was able without any difficulty to recognize the situation of this organ.

§ Marked No. 25

constituting the part immediately above the outer angle of the orbit of the eye, outside of the organ of colour.

When large, it gives a rectangular form to the outer angle of the orbit.

Persons endowed with this have a great delight in order: and, if not possessing good sense, embitter the lives of those by whom they are surrounded by a perpetual activity of it, exercised towards individuals, who may not have the same organization.

They are what are called particular people. Their perpetual observation is—"A place for every thing, and every thing in its place."

The last relative organ is that of NUMBER.*

The situation of this organ is readily recognised. On feeling the forehead at the external angle of the orbit a ridge will be found extending upwards. On the outside of this ridge is the organ situated; when large, the arch of the eyebrow is either much bent downward, or there is an elevation at the external angle of the orbit.

As a relative faculty, it is quite evident, that, as individual existences may be many, this will take note of the relation in reference to the number.

This organ is therefore, it may be presumed, large in celebrated calculators. It is so in George Bidder, in Humboldt. And it is confirmatory of the existence and of the situation of this organ, that in the portraits or the busts of Euler, Kepler, Napier, Gassender, La Place, Pitt, this organ is represented as largely developed.

This organ is essential to the pursuit of arithmetical calculations; and of algebraical and logarithmal calculations so far as these are connected with number.

This organ and its functions relate to the adverb of number.

PRACTICAL REMARKS.

Practical Remark, 1.—It is evident from the history of the various relative faculties, that, in selecting occupations for the rising generation, it is of the highest importance that the faculties required to be exercised in different occupations should be known: to effect this it is necessary that the principles of trade should be ascertained, and then, these being ascertained, the phrenologist will be able to decide whether the individual has those faculties, so developed, as to enable him to pursue a particular occupation with benefit to himself and to the community.

Practical Remark, 2.—By the circumstance, that some individuals have a large, and others a small, organ of number, and so in reference to other organs, we have explained the fact, that children may be clever in one department of learning and not clever in another department: and we are taught the absurdity, both of punishing the boy who does not excel in arithmetic, and of praising the

* Marked No. 27.

boy who does; that is, when the difference depends upon the difference connected with development of power, and not upon the difference in degree of industry. And so, with the merit and the demerit of success or want of success in other branches of learning.

Practical Remark, 3.—The evil of making the power of *playing music* with excellence an accomplishment to be possessed by all young ladies, is rendered apparent. Since, it is quite evident, that a person, with a deficient development of the organs of time and tune, can never become a superior musician, although she sits on a music stool six hours a day, and is rewarded by *curvature of the spine*, and by other maladies, even worse, resulting from the constrained sitting posture.

THE NECESSITY OF DISCUSSION ON *ALL* SUBJECTS, WITH THE VIEW OF ARRIVING AT TRUTH, BY W. H. P.

" Right
And wrong are accidents, and men grow pale
Lest their own judgments should become too bright,
And their free thoughts be crimes, and earth have too much light."
CHILDE HAROLD.

MY DEAR MR. EDITOR,

IN such an age, as the present,—when the *greatest happiness of the greatest number* is, as it ought to be, the grand moral maxim; when the creations of the poet, the reasonings of the philosopher, the discoveries of the man of science acknowledge this doctrine; when, even the deliberations of the senate and the enactments of the legislature are compelled to bow to it, and when every effort is being made, in the formation of societies, and the publication of works, to urge on, and carry out its principle, is it not a monstrous marvel that any restrictions should be imposed upon the discussion of those subjects which concern most intimately the condition and the prospects of mankind?

The institutions, literary, scientific, &c. &c., that have sprung up in such numbers of late, destined in their formation for the most worthy of all purposes, the spread of knowledge, and the consequent promotion of happiness, have generally, with the other means adopted, for the furtherance of their views, and the realization of their design, established *discussion or debating* classes. In them all questions connected with literature, arts, science, morals, &c., are argued, but strange to say, RELIGION and POLITICS are expressly and exclusively prohibited.

Is it not an almost incredible circumstance that these topics should be the only ones interdicted in a place, and under auspices apparently so favourable to their investigation? What causes could have originated such a system of exclusion? What reasons can countenance and perpetuate it? Can it be that these subjects are not sufficiently important; that they have not so great an influence

over the lives and the happiness of man as to be entitled to our attention; that, whilst, increased knowledge, enlarged views, and sounder principles are desired, in regard to all other matters, inquiry and examination would be wasted upon these? Is it that religion is so mighty, so sublime, so incomprehensible a theme, so far above the search of ordinary faculties, so little in sympathy with the general heart, that it must be delivered up to the exclusive possession of priests, unwisely trained, and too richly rewarded? And, that the government of our country is placed in such excellent and unquestionable hands, its state and its wants so well understood, the multitudinous tendencies and capabilities of its people so happily appreciated, the levying of its imposts, the distribution of its revenues, the enactment of its laws, so wisely ordered, that controul over our statesmen is superfluous, knowledge of their policy unnecessary? Neither of these can be the reasons. Common sense proclaims it impossible, universal consent establishes the contrary; the manifold writings, in constant circulation, free in their conduct, unlimited in the extent of their inquiries, add their testimony of contradiction.

It has been stated as a reason, (though it is perhaps too false and too foolish to be treated as one,) that arguments upon these topics tend to the interruption of good feeling and friendship, and to the promotion of discord.

Cannot the most interesting of all themes be canvassed without creating animosities? It is an insult to humanity to suppose otherwise!

Enlightened, as we now are, the discussion of religion, breathing as it does, a *a spirit of unbounded love*, full as it is of lessons of universal charity, *must* tend to the extinction of feuds, rather than to their creation. It must soften our asperity, subdue our anger, arouse within us our best and kindliest feelings; and, by strengthening in our breasts gratitude to and admiration of God, must awaken a more benevolent and influential love for all the beings of his creation.

In times of darker ignorance, when religion's principal attributes were its solemnity and gloom; when it consisted chiefly, if not entirely, in pompous pageants, external ceremony, and outward observance; when the only persons interested in its progress and results were (more than now) those who reaped from it pecuniary benefit; when its superstitious sway made slaves of men to extend the dominion and augment the power of priests; when, in reference to politics, the whole world presented a gloomy picture of despotism on the one hand, and slavery on the other; of the rapacious lord, the plundered and degraded vassal; when society existed but for its aristocracy; when princes were the community, the people but their plebian instruments; *when thus it was*, such discussions might be dangerous, and there might be reasons, though infamous ones, for preventing them. But, now, when the people have worked out for themselves a better state of things, when their claim to majesty is established, when they are striving to secure and increase their just influence, when a sympathy in feeling and

a *commonality* in object have arisen and are spreading amongst them, yielding a nutritious and abundant harvest; whilst thus it is, great good *must*, nothing but good *can*, emanate to the whole by the consideration of whatever most affects us all.

Religion and Politics demand our first and closest attention. No other subjects can be of such paramount importance in themselves, or exercise so material an influence over every other consideration. On them depend the enjoyment, the enlightenment, the independence of our present existence; every prospect of happiness in our future, our eternal state.

Religion, to establish and maintain its beneficial power, and realize its bright and glorious promise, must be felt,—deeply, constantly, energetically, felt. To be thus felt it must be *understood;* to be understood it must be examined: we cannot acknowledge its principles, and obey its dictates, without comprehending both. All this is now very generally seen and admitted. What more likely to instruct our finite minds, to purify our unclean hearts, to increase our admiration of God's mighty works, to kindle emotions of gratitude for his bounty and his tenderness, to show us the happiness of obedience, the misery of disobedience to his divine law, to perpetuate and multiply the blessings of the religion of his Son, our Saviour, than conversation, enlightened, benevolent, unrestricted conversation.

Whatever improvement has been effected in our social conviction, whatever blessings we have yet procured, whatever liberty we at present enjoy, are the result and the reward of incessant and indefatigable exertion. To advance, nay to sustain, our position, a continuation of the most strenuous efforts is necessary.

Much has been done in the way of advancement, but there is much more to do. Many wrongs have been redressed, there are still many to redeem; many good purposes have been effected, there are still many to accomplish; many atrocious bonds have been severed, there are still many to burst asunder; many barriers to improvement have been borne down, there are still many mighty ones to scatter away. The law of progression is acknowledged, its power is felt, its impulses are obeyed, but manifold are the impediments in the way of the realization of its purpose. It is unnecessary to point out the nature of those impediments; if they are not appreciated they are known. The selfishness and the ambition of a numerous and immensely powerful aristocracy; the absurd, but deep-rooted pride and prejudice, general in the middle ranks; the poverty, the degraded condition, the deplorable ignorance, of a great mass of the humble classes; present a combination of dangers and difficulties sufficient to dismay no doubtful courage, to defeat no unstrenuous efforts.

What are the means wisdom would suggest, and philanthropy employ, for the promotion of the great purpose of universal advancement and melioration?

The press, notwithstanding the *stamp-shackles* upon its freedom, and the frequent and fearful abuse of the power it wields, is a good and great instrument. It rises superior to prosecution; every attempt to crush it confirms its authority, and gives increased ele-

vation to its tone. It is in a great measure free, and it avails itself of its freedom. *Why does not the voice of man* do likewise? There is no legal enactment, or at least no law that can be enforced, to prevent *free public discussion.* It has in it elements of a power equal in strength, and superior in purity, to the press. Why does it not co-operate with that instrument? assist its labours, and forward its designs? How beneficial, extensively and effectually beneficial, must discussion, embracing *all* subjects, and *comprehending* all views, with proper directions, and under judicious arrangement, prove! what important results must it achieve, what inestimable blessings propagate! In supporting reason and detecting sophistry; in establishing truth upon its adamantine rock; in "scattering to the winds of heaven" the sandy base of falsehood; in tearing off the mask that so frequently veils moral and mental deformity; in endearing to us the perfections of the natural and the moral world; in making us familiar with whatever is beautiful and magnificent as objects of contemplation, or subjects for remark; in dispelling the clouds of darkness that have so long enveloped us in their mist, and infested our existence,—its instrumentality would be swift and certain.

The most brilliant, the most eloquent, the most convincing BOOKS, are often read with no general or permanent effect. Here *debate* has a manifest superiority; it compels thought, rivets attention, extracts argument. The animation, the excitement, the generous rivalry, the desire to shine, the dread of inferiority and its exposure, are actions almost undividedly good.

On the part of a large portion of the public, there is a strong natural disposition *for debate.* It is enjoyed wherever it can be obtained—harangues are sought with eagerness, and heard with rapture. The strong desire leads to the support and the applause of much that is really worthless.

Discussion in public will take place, if not under favourable, under unfavourable auspices; if not with good, with evil consequences. The scheming and meanly ambitious politician, the furious and deluded bigot, may gather round him knots of human beings, and rave and rant and lie to them with impunity—darkening the minds, inflaming the passions, destroying the principles, and debasing the nature of his hearers. But a society of men, prosecuting all other inquiries, pursuing all other studies, must avoid religion and politics as a spectre or a pestilence! What a denial of truth! What a yielding up to error! What an acknowledgement of worthlessness! What an abandonment of blessings is there in this! There are some institutions, and those generally which make the least pretension, which do indeed set a glorious example; some in whose halls all subjects are discussed, and those most fully and most freely, in which they are most concerned: admirable are they in the decorum observed, and in the results achieved. Why should *literary* and *scientific* societies, esteeming themselves of superior intelligence, and claiming for themselves a higher rank, be compelled to take their tone from these? Why did they not vigorously originate the system? Why—oh why—will they consent to con-

tinue in the rear, confessing themselves less enlightened in mind, less independent in spirit, less controllable in conduct, and less interested in their own advancement, and the progress of the whole world towards perfection.

W. H. P.

4th December, 1835.

Note.—The above communication contains an immense mass of truth. The modifications, however, under which the truths contained, require to be manifested, will be stated in the next Number. One Society, the Finsbury Discussion Society, discusses all subjects, Political, Religious, Scientific and Literary.

On Digestion. Essay. V.—*The Intestines. Small Intestines. Chylification. The Chyle. The Lacteals. Bile. Mesenteric Glands. Thoracic Duct. Large intestines. The evil of taking purgative medicine. Sedentary occupations. Calomel given to Children. Walking, why beneficial?*

In the last essay it was stated that the stomach ends in the second intestine, called *the Duodenum.*

This intestine takes a peculiar curve, as may be seen by observing its course in the wood cut, *p.* 70. In this curve at the upper part, two *pipes*, or *ducts* enter; one, conveying the *bile* from the gall-bladder and the liver, called the *common bile duct*, and the other, conveying a liquor from the pancreas or *sweatbread*, (as it is commonly called). This duct is named the *pancreatic duct.* These two fluids are therefore introduced into the duodenum, and exert there upon the *chyme* (which has passed from the stomach into this intestine) a peculiar action, changing the nutritive part into a *milky* substance called *chyle*, which it in part separates from the other part, called the *excrementitious.*

This chyle consists of the *nutritive* matters in the food, which food seems, by the action of the bile and of the pancreatic juice, to be divided, as was stated, into two parts, the *nutritive*, called, as was noticed, *chyle*, and the other, the *excrementitious*, to be expelled afterwards from the body.

It is evident that the condition of these two agents must, as connected with this change, most materially modify the nature of the nutritive matter itself: hence affections of the liver are so often connected with imperfect nutrition, with dyspepsia, and other diseased actions in the system.

The next intestine to the duodenum is the *jejunum*, so called because it is often found empty. This intestine is long and terminates in the next intestine, called the *ileum*, situated lower down in the cavity of the abdomen. These two lie in about fourteen folds, passing from right to left: and are generally known by the name of *small* intestines.

They are lined internally, like the stomach and the duodenum, by a *mucous* membrane, which is *puckered up into folds*, thus giving a more extended surface for the spreading out of the extremities of certain vessels, having the power of absorbing the nutritive principle, called the *chyle*, as it passes along the intestine, mixed with the excrementitious part. These vessels terminate by open mouths on the mucous surface, and seem to be innumerable. They are called *lacteals*, because, from absorbing the chyle, which has a whitish appearance, like *milk*, they have the appearance of being full of milk, the Latin name for which is *lac*.

The appearance of the inner coat has obtained for it the title of *villous;* which, besides affording an opening for the passage of the lacteal vessels, is perforated by the ducts or pipes, extending from innumerable little glands, which secrete the *mucus*, by which the intestines are both lined and protected.

This nutritive liquid is received by a number of vessels, which are distributed through a beautifully expanded membrane, embracing all the intestines, keeping them in their proper place, called the *mesentery*.

This mesentery consists of two layers, between which these lacteal vessels, veins, arteries, nerves and glands, called *mesenteric glands*, almost innumerable, are disposed.

Through these mesenteric glands the chyle passes; and when, as happens in some diseases, particularly of children, these glands are diseased and become hardened, the chyle can no longer pass: nourishment ceases: emaciation occurs: fever supervenes, and death concludes the phenomena.

These intestines are abundantly supplied with blood-vessels, and nerves: hence they seem to be endowed with much sensibility; and hence also they are particularly liable to inflammation and other diseases consequent thereon.

The ileum, the latter of these two described, ends in the next intestine, called the *cœcum*, which is situated on the right side near the groin. This cœcum or blind gut as it is called, has, at its termination in the *colon*, a peculiar *valve*, which seems often to be the cause of disease by becoming a source of obstruction; but which is intended to prevent the passage of too great a quantity of the excrementitious part of the food into the large intestines, and also the return of any into the small.

The food, principally the excrementitious part, now passes into the colon, which rises perpendicularly upwards on the right side, and is here called the ascending colon. The food consequently ascends contrary to gravity. The *ascending colon*, when reaching the liver, passes under a portion of that organ, it then runs *transversely* across the upper part of the abdominal cavity, lying *over*, that is, in the front of the duodenum and of part of the stomach. After crossing to the left, being called in this transverse part of its course, the *transverse colon*, it descends downwards, perpendicularly on the left side of the body, and is then called the *descending colon*. At the lower part of its course, just about the left groin,

it assumes a very curiously curved form, distinguished by the term *sigmoid flexure*, because similar to the Greek letter Σ, sigma.

The sigmoid flexure ends in the *rectum*, which is the last gut, and at its end, called the *anus*, a series of muscular fibres, designated, from the power of *shutting* the *gut*, a *sphincter* muscle, is situated.

The large intestine, called the colon, is characterized by *strong bands*, which run horizontally along its course, and which, in the affection, styled the *colic of painters*, seem to be affected with spasm.

Such, then, are the parts through which the food passes: these parts being, it should not be forgotten, but one tube, receiving different names: so that, the intestinal tube, which is one, may, with propriety, be stated to begin at the mouth and end at the anus; and in this course occupies a length several times the length of the body.

It may be interesting to add, that, after the chyle is absorbed from the inner surface of the intestines, and carried by the lacteal vessels to the mesenteric glands, it, after passing through these glands, is carried through other vessels, passing from these glands, into a *reservoir*, situated close to the *spine*, or back bone, called *the thoracic duct*, which winds upwards on the side of the spine, and deposits its valuable treasure into the blood, at the point where two large veins enter the heart, and thus the chyle is mixed with the blood, and becoming part of the animal mass, the process, thus realized, is named Animalization.

So that to complete the process of digestion, the following processes are gone through: First, *mastication*, effected by the lips, teeth, jaws, tongue, and salivary glands: second, *deglutition*, effected by the tongue, the pharynx, the muscles of the lower jaw, and the gullet: third, *chymification*, effected by the stomach and the gastric juice: fourth, *chylification*, effected by the bile, pancreatic juice, and the duodenum: fifth, *absorption*, effected by the lacteal vessels: and sixth, *animalization*, effected by the circulation of the chyle along with the blood through the lungs.

Such is the wonderful mass of processes, which are perpetually going on in the human body. How few know of these things: and how few reflect upon them. But who can reflect upon them without feeling obliged to testify to the wonderful skill of Him, who made man thus?

All the organs connected with these processes of chymification, chylification, absorption, and expulsion, are situated in the *cavity*, formed, in part, by a membrane which is attached to the ribs, and extending across the under surface of the chest backwards to the spine, called the *diaphragm;* in part, by the skin and the other soft parts situated in the front and extending from the ribs downwards to the hips; and, in part, by the spine behind; and, finally, in part by the basin, called the *pelvis*, forming the hips below. This cavity, or casing, containing these organs, is called the *abdomen;* commonly called the belly.

In completing this description of the process of digestion, it

seems necessary to notice another circumstance, namely, that the intestines have a peculiar moving-over-like motion,* called a *peristaltic* motion, which aids the process of digestion very much, and more particularly the expulsion of the excrementitious part of the food; and, it appears, that this peristaltic action is most considerable in the small intestines, whence the process of absorption goes on. This peristaltic action depends upon that layer of intestine which is called *muscular*, which consists of two sets of fibres: the outer set being longitudinal; the other, the inner, being circular: the former shorten, the latter narrow the intestinal canal.

Besides the provisions noticed to aid in the process of digestion, there is one more, and that is the action of the muscles of the abdomen. The covering which forms the protection and the support of the intestines consists of *muscles* or *flesh*, endowed with the power of contraction and extension: and these muscles are engaged in lifting the hips in walking. The action of these muscles, in their alternate contractions and relaxations, constantly influences the intestines, by aiding this peristaltic motion, and thereby aiding the expulsion of the excrementitious matter.

But it may be supposed, that, as the intestines must be continually moving and coming in contact with the walls of the abdomen, formed by these muscles and the skin which binds them together, some irritation might result. This might have been the case: but any inconvenience from this cause has been prevented by the Creator making a most interesting provision. It is the existence of a large empty, delicate bag, called the *omentum*, (composed of the membrane that covers the intestines, called the *peritoneum*,) hanging from the large curvature of the stomach, extending over the greater part of the small intestines, and applying itself closely to them in their windings.

Within the folds of this omentum fatty bands are found to exist, and, it is from the increase of these, that persons become dangerously corpulent.

This bag not only takes off any injury that might result from the cause stated, but prevents adhesions between the intestines and the peritoneum, lining the inner surface of the abdominal muscles.

Practical Remark, 1.—Any thing which tends to disturb the liver must impede the formation of proper nutriment by preventing the formation of proper chyle; dependent upon the proper condition of the bile. The bile is necessary not only to form proper chyle, but also to give to the excrementitious part of the food that character, as to render it sufficiently stimulating to the intestines so as to occasion them to force the same forwards: and hence the excrementitious part has a bilious colour, which is dependent upon the bile: and which,

---

* The peculiar phrases, *intestine broils*, *intestine commotions*, *intestine dissensions*, receive much force in reference to their meaning from the knowledge of the above fact.

when absent, as in jaundice, occasions the excrementitious part to be of a peculiarly pale colour.

Practical Remark, 2.—Another deduction from the above statement is, that as the intestinal canal is of the same *relative* length in almost all individuals, the rule should be attended to of seeking the expulsion of the excrementitious part once in 24 hours, which seems to be the usual period. Persons liable to constipation, should be particular in attending to the regular solicitation of the bowels, which should be at one particular time of the day.

Practical Remark, 3.—As the food ought to be, when mixed with the various juices in the intestines, a sufficient stimulus, so as to call into activity the peculiar irritability, with which the muscular coat of the intestines is endowed to force onwards the excrementitious part of the food, it is evident, that, it should always be the aim of every individual so to regulate his food as to make that food effectual to this result.

And, it is further evident, that the practice of habitually taking *purgative* medicines is bad, because purgative medicines act by exciting this irritability of the muscular fibres of the intestines; and, it is evident, that the more frequently the action of the bowels is made to depend upon the stimulus, the more needful will it be to increase that stimulus, and, at last, the intestines will never act without. *Purgative* medicines are to the *bowels* what *spirit drinking* and *opium eating* are to the *stomach*. An increase of dose is necessary, because the organ becomes dead to usual stimuli, and requires unusual stimuli. The wise physician therefore endeavours in prescribing purgative medicine (which any fool can do), to combine it with such agents that will give strength to the intestines so as to prevent the necessity of their increase of dose.

Practical Remark, 4.—Another deduction from the preceding statement is, that *sedentary* occupations cannot be healthy: since the action of the bowels being dependent in part upon the peristaltic motion, and also upon the action of the abdominal muscles, the former of which cannot be aided by sedentary habits, and the latter action cannot at all take place. Hence, it often happens, that a long walk will occasion the bowels to obtain relief. Hence the benefit of *horse* exercise: but there is no purgative medicine so good as the exercise of walking. Hence, it is further evident, that it is contrary to the will of the Creator, as written in this part of the human constitution, that man should be obliged to pursue sedentary employments to an extent so as preclude other bodily exercise. Hence also will be seen the importance of what are called *gymnastic* exercises; upon which a paper will be introduced into the ensuing Number.

Practical Remark, 5.—The mesenteric glands, through which the chyle passes, are most important. In scrofulous children they are particularly liable to be called into diseased activity, and, therefore, such children should be particularly watched over. Any tendency to emaciation should be carefully observed: and the system of giving calomel powders on every trifling occasion should be particularly guarded against.

LITERARY AND OTHER INSTITUTIONS.

As a means of developing human power, as a source of satisfactions, the most pure, to the human faculties, and as a nursery where the freedom of the human race is to be developed, we hail the establishment and the prosperity of Mechanics', Literary and Scientific Institutions. It is therefore with considerable pleasure we have received information, that, in the distant, the far distant, the once and even now dark corner of our land, namely, at Stratton in Cornwall, a Literary and Scientific Institution has been established: that that institution has prospered: that it has a good library of books: that Lectures have been delivered, and that many other beneficial results have appeared.

One result is particularly pleasing. Once, not *ten* years since, there was no *printing*-press at Stratton. Now the Report forwarded to us by our friend, Thomas D. Hawker, Esq. is printed, and printed well, and with taste, and that at Stratton. At Bude, nearly ten miles distant, the printing was done formerly when the intellect or the business of the people of Stratton required the aid of the press. Aye, and what is more, it was not many years since, when there was no *post* to Stratton, none nearer than Bude. Now there is a post.

We find among the names of the men, supporting this Institution, Davies Gilbert, the philosopher who brought young Davy, afterwards Sir Humphrey, into notice; Sir W. Trelawney, Bart. M.P. for the county, (and indebted is he, we take the opportunity to state, to the *energy* connected with the *spirits* that guide the Stratton Institution, for his return to Parliament). A more humble name we find, but it is the name of a noble-minded patriot, Mr. George Call. And, one more, known as the Author of "Pompeii" and of "The Records of the Western Shore," is to be found, giving the Institution his aid. This is as it should be. Many others are worthy of name. May its President, Mr. H. James, sen. and its Secretary, Mr. W. Rowe, and our old friend Thomas D. Hawker, Esq. continue their services in the good cause: and then we may hope that Stratton shall shine, and the name of Stratton shall be enrolled as the place where scientific light first dawned upon the western shore; the place whence there may spring forth another Davy, who shall give chemic science his aid; and where many a patriot shall rise to protect the liberties of his country, by the power of an arm, cased in might and wielded with the *enlightened understanding*; and, finally, shall be regarded as the place which poetry's sons shall acknowledge as their natal soil; and, in proof, that Cornwall, barren on her surface though she be, has mines of wealth in her depths, we conclude this notice by the following most beautiful specimen of poetic feeling* and of simple pathos that ever we read. It is equal to any of Wordsworth's.

---

* It will be found on the cover, to be introduced into the body of the work in the next Number.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

FEBRUARY 1, 1836.

DROWNING AT SEA SOCIETY. — OBEDIENCE AND HAPPINESS—DISOBEDIENCE AND MISERY.

Essay III.

Having explained and established in the Essays on the above subject in the two preceding Numbers, *That ships are built with the expectation that they will sink; That it is the interest of ship-builders not to build strong ships; That it is the interest of ship-owners, under the present system, that ships sink; That Government derive a considerable revenue from the sinking of ships;* the fifth proposition, That ships can be built so that it would be impossible that they could sink, comes now under consideration.

In considering this proposition, it may be proper to notice at the outset the sense in which the word "impossible" is used. It was stated in a preceding Essay "That any body will float in water that is lighter than the weight of a quantity of water equal to it in bulk." Wood is lighter than water; and, therefore, as long as the wood of a ship is so compacted together as to present a perfect surface of *outward* pressure to the water, it is not possible that the ship can sink. In other words, the law is that wood of a certain weight will float in water: obey that law, and then the benefit must result. The wood must float, and life must be preserved: but violate the law, either by introducing into the ship, bodies which, by their very great weight, make a pressure greater in amount than is produced by the pressure of a bulk of water of the same size as the ship, and the ship *must* sink.

It is evident, that, for safety, two things are necessary: first, to have a vessel made so that the power of pressure from the water, called the *supporting* power, should be greater than the power of pressure arising from the contents of the vessel floating, called the *depressive* power; and, second, to keep the water, the supporting power *without*, from entering the ship, and becoming a pressing down power within.

As all ships, however, contain iron bolts and other bodies, heavier than a quantity of water of their own bulk, and, in addition, carry cargoes, consisting of articles heavier than water, it is evident, that the safety of a ship depends principally upon the exclusion of the

water, situated outside. Since, from these contents, a vessel must sink, if filled with water, although a wooden vessel, made *entirely of wood*, and filled with water, and placed in water, would not: because there are no parts about the vessel, wholly wooden, heavier than the water in which it floats; and, consequently, the vessel remains suspended.

The object of search, therefore, is clear. Man has only to discover some mode of constructing ships by which the entrance of the water can be prevented. Man, in addition, can then, if avoiding to introduce any very ponderous bodies into the vessel thus constructed, defy both wind and wave; and why? Not from any spurious hardihood despising the Creator's law, but because he rests upon the *law* of the Almighty.

Man has discovered this mode, and to Mr. Ballingall, of Kirkaldy, in Fife, society is indebted for the circumstance of this mode of construction having been brought before the British Public.

The plan of Mr. Ballingall is, to make the timbers water-tight, which will admit of a caulking inside and outside, before the planks are put on, which we may call two caulkings, making four inches of substance, and the caulking of the outside plank two more, and then the caulking of the inside, also two more, which would make, in all, eight inches of substance, instead of two, under any calculation. But, in addition to the strengthening of the vessel to an extraordinary degree, these inner caulkings would be much better protected from danger than the outside caulking, and, consequently, would add to the safety of the vessel, to an almost incredible extent.

But it may be urged, but this will render the expence of building so much greater? It seems not, the increased expence not amounting to more than one sixth of the whole cost of the vessel, when fitted and complete for sea.

Some ships have been built thus at Kirkaldy, and the beneficial consequences have been rendered fully apparent. The following is an extract from a Newcastle Journal: "The Kirkaldy smacks *Enterprise* and *Fifeshire* were built at Leith in 1826, on the ordinary construction. They were fitted on Ballingall's principle last summer, in Kirkaldy harbour. The cost of fitting each of them was under £30. Since then they have been at sea in several very heavy storms, and have not admitted a drop of water: in consequence their pumps have never been used since they were fitted; and the vessels have become favourites with passengers in consequence of having no bilge water. We observe an advertisement in the Fifeshire Journal, which states that, 'in point of safety, they are admitted, by ship-masters at London, to be superior to any smacks out of Scotland.'"

These ships were further in the dreadful storm of Wednesday,* the 20th of March, 1833, without making a drop of water. And on the 21st of October of the past year, 1835, Mr. Ballingall, writing

* It was in this storm that the Erin steamer foundered, and drowned every person on board; and fifty-nine vessels were reported at Lloyd's as having been lost in the course of *two* days.

to the Essayist, observes, That the main pumps of these vessels have never been used since the alteration.

The Essayist himself, in returning from a visit to Scotland last year, was much delighted by the freedom from unpleasant smell in the Royal Victoria steam-ship, in which he returned. There seemed to be no bilge water. The Essayist did not know at that time that this vessel had been constructed on Mr. Ballingall's principle, being built entirely in the centre of solid timbers, so closely framed together, as to admit of the seams being caulked both inside and outside; and, at the extremities of the vessel, the usual spaces are filled up with lighter timber to the water line, so that the vessel would float independent of her planking. From this construction the ship may be regarded as perfectly safe; and has little or none of the vibrating motion so unpleasant in steam-boats.

Besides these ships, belonging to companies, other evidences are at hand to prove that ships can be built so as not to sink.

Men-of-war have now a most excellent construction. The hulls are built of a solid mass of woodwork, of fifteen to twenty-one inches, in three separate parts united into one, having the grain of the different pieces of wood placed transversely to each other, and, consequently in the strongest possible manner.

And Mr. Knowles, of the Navy Office, in a letter to Mr. Ballingall, dated 24th October, 1831, says, "There are many instances in the Navy of ships having been saved in consequence of the introduction of solid bottoms. Those which I now recollect are the Barham, Pylades, Vigilant, and Success. Within a few days a drawing has been received, showing the damage which the latter ship received when she was ashore in Cockburn Sound. The whole keel was carried away; the lower piece of stem also; five feet four inches of the stern-post, and four pieces of the dead wood; nine planks of the bottom were off amid-ships, and many planks in the bows, and yet this ship was floated off."

"The whole Navy proves that the ships with solid bottoms have been more durable than they used to be when openings were left."

The benefits, arising from such a method of building ships, have been evinced, most fortunately for the sake of illustration, by one of his Majesty's vessels, the *Pike*.

The account is so interesting, and so strikingly illustrative of what human ingenuity can do when exercising itself in accordance with the laws of the Creator, as to justify its insertion in the next Number.

The Essayist therefore leaves the proposition under consideration, believing that its truth has been established, viz. *That ships can be built so that it would be impossible they could sink.*

There is another matter, which is worthy of attention in connexion with the proposition, that ships can be built so that they cannot sink, namely, that water is the *most harmless agent*, viewed in relation to its effect upon a body floating upon its surface. Thus if water be viewed as a *body*, the particles of which

have *free* motion and are *yielding*, it becomes evident, that the pressure applied to its surface is of the most kind and friendly character. It seems to be a giant, playing with a coquetish playfulness and gentleness with the bodies which it bears on its bosom. Its power is enormous, but that power is, when viewed in relation to the weight connected with the power, applied in the most gentle possible way.

The concluding proposition is now to be considered: it is, THAT IT IS AN INSULT TO THE DEITY TO CHARGE THE CALAMITIES OF THE DEEP UPON HIM AS THE EFFECTS OF HIS VISITATION, WHEN ACTUALLY THESE CALAMITIES ARE THE RESULTS OF MAN'S VIOLATION OF HIS LAWS.

In considering this proposition, the Essayist knows that there are many prejudices with which the subjects necessary to be noticed are connected: he will try and steer clear of the same as far as possible.

At the outset it seems proper to remark, that it is perfectly evident, that the phenomena of the universe are dependent upon certain laws, appointed by the Creator. It is further evident, that, these laws are to be known only by a study of the phenomena themselves: and that, after man has, by his study, accumulated the facts in relation to these phenomena, he is authorized, by the very bestowment of reflective faculties upon him, to deduce from these facts their causes. This inductive process leads him to the discovery of the laws: and, these laws being discovered, he finds that his power to avoid miseries, and, at the same time, to increase his comforts, is almost immeasurably augmented. This power of augmentation and of avoidance is, however, it should ever be remembered, dependent entirely upon the existence of the law and the preservation of his conduct and of his actions in accordance with the law. His power is not dependent merely upon the law existing, but upon his regulating his conduct, so as to make that conduct square with the law. If he obeys the law, he must derive, indeed he cannot help deriving, the benefit. If he were to wish not, this would make no difference. The law is fixed; the consequences of the law are fixed; and it is the fixedness of the law which is the source of the benefit.

To carry these views to the subject under investigation. *A ship sinks:* why? Because it is the will, the direct, the irresistible will of the Deity, directly exerted, to make the vessel sink? Oh no! the will of the Creator, as exhibited by phenomena, and as capable of being illustrated by experiments, is that a vessel, lighter than a body of water of its own bulk, must float. It is the will of the Creator, as manifested in, and as operating by, this law, that man must, in riding upon the water in a properly made vessel, that is, a vessel, *made in accordance with the conditions dependent upon the law*, be safe. This is the will of the Creator, as exhibited in the law. But if the law is violated, there is no special interposition to send the vessel to the bottom. The vessel and its contents go there because the law, which preserves the obedience-to-the-law-made vessel safe upon the waters, is violated in the case

of the disobedience-to-the-law-made vessel. There is no more a direct interposition of heaven in the vessel that rides than in the vessel that sinks. They are both placed under the same law.

To ascribe the sinking of vessels to the agency of the Creator is, if it were possible for puny ignorant man to insult such a glorious Being, an insult to that Being, whose tender mercies are over all His works; who desireth not the death of the *physical* sinner, any more than he desires the death of the moral sinner: but rather that he should turn to Him, that is, *to His truth*, and live physically, or, in reference to moral truth, morally.

The Creator gave man dominion over the earth; and that dominion consists in the ascertaining of, and the putting into force, the laws regulating the earth. He can never be said to have dominion until he can obtain safety in reference to every part: and all that man has to remember is, that this dominion comes not from himself, but is derived from, and is to be found only in connection with, the discovery of, and the obedience to, the laws of the Creator. What a motive is this to the exercise of industry, and of talent in the search after these laws: what an imperative command is it to man to obey these laws: what a pleasant certainty it will give to every action of man's being, and what a tendency to induce men to admire the sublime order which the Creator has established.

Many persons, the Essayist is aware, consider these sentiments as dangerous. They think that the Deity has some peculiar ones in behalf of whom he occasionally sets aside His laws, and their self-esteem is offended if this prerogative be denied. They would answer in the affirmative to the questions of Pope,

> "Shall burning Ætna, if a sage requires,
> Forget to thunder; or recal her fires?
> On air or sea new motions be impress'd,
> Oh blameless Bethel! to relieve thy breast?
> When the loose mountain trembles from on high,
> Shall gravitation cease if you go by?
> Or some old temple; nodding to its fall,
> For Chartres' head reserve the hanging wall?"

Such opinions have been encouraged in all ages. Hence in some countries, even now ships are not allowed to sail on saint's days? Hence the custom of praying to God that ships may have safe voyages: which, in many cases, is asking God to set aside His laws, because *we* ask him? It is just as absurd as the man, who, going out to a civic feast, at which he knows he shall eat too much, standing up before dinner commences, and asking God to bless what he is about to eat to his (the man's) good, and to His (God's) glory? It is just as absurd as a man, who, living in a marshy district, and constantly troubled with ague, praying to the Deity to deliver him from the ague, while he persists in living in the marshy district?

Every thing that we see calls aloud upon man to obey the law:

calls aloud upon man to behold that the law is intended for his happiness, and that the Creator woos him, by the benefits arising from obedience, to the delights of obedience.

Having thus endeavoured to establish the propositions laid down: having, as calmly as the subject permitted, developed the monstrousness of the Drowning-at-Sea Society: having, thereby endeavoured to awake the public mind to a sense of of the injuries inflicted upon society by ship-owners, insurance-brokers, and others, we leave the subject in the hope that the public will awake to its duty.

The following account of the loss of the Neva may be recorded as affording an excellent illustration of some of the statements made in this Essay.

Examiner Newspaper, Saturday, December 26, 1835.

LOSS OF THE NEVA.

The Neva, Captain Peek, with female convicts, for New South Wales, was totally lost, on King's Island, in Bass Straits, about the beginning of May, and of 239 people on board, only the captain, chief-mate, seven seamen, and six convicts, were saved. The Neva sailed from the Downs, on the 11th of December, in company with the unfortunate George the Third, whose loss, with a great number of male convicts, was lately announced. We gather, from the accounts, that, at noon, on the 13th of May last, according to the ship's reckoning, she was 94 miles from King's Island, at the entrance of Bass's Straits. A good look out was kept for land, which was made on the 14th of May, at two in the morning. Two hours afterwards breakers were suddenly discovered right ahead, and immediate orders were given to tack, by the captain, who was on deck. *The vessel was placed in stays, and struck immediately; she unshipped her rudder, and became quite unmanageable.* The wind was blowing very strong, and she was under double reefed topsails. She struck again immediately — most violently on the larboard bow, swung broadside on the reef, and immediately bilged. The pinnace was loosened, and the captain, surgeon-assistant, and two of the crew got into her. The prison was thrown open by the violence with which the ship struck, and the female prisoners rushed immediately into the boat, and swamped her; all, excepting the master and two of the crew, perishing. The captain regained the ship, and launched the long boat, but care was taken that too many should not get into her. The long boat was upset by the force of the surf, and the whole precipitated into the sea. The master and chief mate were again saved, as they succeeded in reaching the ship, *which almost immediately went to pieces.* The scene at this moment was most awful, and wholly indescribable. The vessel was divided INTO FOUR PARTS, which were covered with females in the dress in which they had rushed from their beds, and, with the remainder of the crew, were

clinging to the wreck, screaming in the most piteous manner. The vessel was soon entirely in pieces, the final work of destruction completed, and the whole on board plunged into the sea. About twenty-two persons, consisting of some of the crew and the convicts, were carried, while clinging to portions of the wreck, to King's Island, about nine miles distant, having been in the water eight hours. Of these, seven died soon afterwards from exhaustion, and the remaining fifteen, after having in some degree recovered from the cold and fatigue, succeeded in erecting a tent with sails, clothes, &c. washed on shore from the wreck. They soon were fortunate enough to recover some provisions, which were also washed on shore, and upon which they subsisted fifteen days. At this period of their sufferings the survivors of the crew and others on board the Neva were discovered by the crew of a small vessel, the Tartar, which had also been wrecked. The crew of the Tartar had a sealer with them, and a dog, with which they secured fish; and thus they subsisted until the arrival of the Sarah Ann, on the 15th of June, a month from the time the wreck took place. A hundred bodies were buried on the shore. The loss of the vessel, it is hoped, will lead to more strict enquiries than have hitherto been made, respecting the general system of fitting out convict ships. It is certain that the Neva was not less than twenty-one years old, having been in the West India trade. This is the third convict ship bound to the Australian colonies which has been wrecked, causing the loss—in about two years—of not less than 528 lives. The Amphitrite, wrecked off Boulogne, led to the death of 170 persons; the George the Third, lost at the entrance of the D'Entrecasteux channel on the 12th of April last, occasioning a loss of 134 lives; and the wreck of the Neva having caused the destruction of 224 lives.

In the next Number we shall contrast the account of his Majesty's ship, the *Pike*, with this account of the convict ship, the *Neva;* and the contrast will demonstrate plainly, that the Report made by order of the Government, upon the loss of the convict ship, is one which ought not to satisfy the British public or the British Government: it is one which the writer of it should be commanded by Lord John Russell to reconsider. His Lordship may rest assured that these *water executions* cannot be allowed to occur, without far more satisfactory assurances and explanations than those which are contained in the Report referred to.

TITHES.

If, say the clergy, tithes were abolished, you would pay one tenth more rent; it matters not, therefore, whether we dip into your pocket for one tenth, or you pay it in the shape of rent. This is a fallacy, for the parson pays not his proportion of the outlay for the cultivation; it is, therefore, an exaction of one tenth of the whole of the farmer's labour and capital, and the labour or wages of all his men, with this additional disadvantage, that if his labours of the year produce a loss, the parson not only does not contribute his

proportion of that loss, but actually comes and takes away a tenth of the *produce*. Thus we will suppose the farmer of 1000 acres to have expended four pounds an acre in the annual process, he will have expended £4000.; the markets decline, his stock die, or from other causes he realizes but £3000.; he is a loser of £1000., of which the parson ought to bear £100., but, instead of that, he enters and takes from the farmer £300., thus adding this heavy downward pressure to the drowning man; and if the sufferer struggles on for the next year he must still struggle, thus weakened, and thus loaded, disheartened by the knowledge that he must carry this slug of a partner at the same risk every year.

If the parsons were entitled to stand in the same situation to Christians, as the Jewish priesthood stood in to the Jews, they would be entitled to a tithe of the INCREASE only not of the *produce*, and the above case shows how sadly this difference between the scriptural mode, and clerical mode of tithing, operates upon the industry and spirit of the working bees.

By the Scriptures the priest could not go to the losing, perhaps insolvent, husbandman, and increase his distress; but by the clerical practice, the poor cultivator does not even get back his own; yet does the parson run away with the tenth share, that is, with a tenth of the remaining £3000.

There were those of old who remembered the saying of the Lord Jesus, "it is more blessed to give than to receive." The farmers find that this saying is, by the clergy, translated, "it is more blessed to take than to give." Thus the parson diminishes the farmer's blessing and increases his afflictions. He lessens the cultivator's gains, when God blesses his industry, and increases his store; and increases his insolvency in seasons of loss and affliction.

Now consider this as happening in every year of scarcity, in EVERY PARISH OF THE KINGDOM, and then consider the enormous and destructive pressure with which the whole weight of a plethoric church establishment must, and does, press upon and destroy the energies and the property of the people. Consider that its effects are first visited upon the labouring poor in the diminished means of his employer—for the distresses and the diminishing capital of the employer are, of necessity, visited upon the employed in diminished wages and narrower allowances. Consider its necessary, certain, and immediate tendency to prevent lands, now barren, from being cultivated, and to drive out of cultivation lands of inferior quality. Consider the demoralization which has resulted to the peasantry, and which is now manifested in the increase of jails and workhouses; in the plans of legislators to feed the poor at a minimum price, and to try them and punish them quickly. See the consequences in the wild and ignorant revenge by incendiary fires, which are now every year becoming more frequent; the hangings, transportations, misery, and bitterness which follow, and the monster system will be, *in some degree*, exhibited in its effects. And when these things are considered, then remember that the clergy are the loudest amongst those who teach that the people have nothing to do with the laws but to obey them.

THE QUAKER AND MR. COMMISSIONER HOLROYD.—VIOLATION OF CONSCIENTIOUSNESS BY SELF-ESTEEM.

The following occurrences are reported to have taken place in the Court of Bankruptcy, before Mr. Commissioner Holroyd, on the 17th December, 1835.

"A curious incident occurred at a meeting to pass a bankrupt's last examination in this court. A Quaker attended to prove a debt, and having neglected the usual courtesy of being uncovered in the Commissioner's presence, the usher reminded him, but the hint being disregarded, the Commissioner told 'Friend Aminadab, that if he came there to transact business, he must remain, as other persons did, uncovered.

"The Quaker advanced with solemn step, and addressed the Commissioner: 'Friend, it is for thy sake and not mine,' that I object to take off my hat, I assure thee it is a very solemn thing to require me to render thee the same homage I render to my Maker. Consider this, friend.'

"Mr. Holroyd replied that he could not enter into an argument on the matter, but if the party came there he must conform to the rules of the Court.

"The Quaker doffed his hat, with this solemn warning to the Commissioner: 'Friend, consider coolly what thou hast done, when thou goest home, think upon it at night, and thou'lt regret it.'" —*True Sun Dec.* 18, 1834.

The mode, in which the above occurrences are related, evinces that the Reporter wished to be humourous at the Quaker's expence: and for the sake of a joke divested of its grossness a violation of the common decencies of society.

Mr. Commissioner Holroyd might have learned from the custom which prevails in the Court of the King, whom, he, the Commissioner, is supposed, when presiding in the Court of Bankruptcy, to represent, his proper conduct towards the Friend. Since, when the Friends take up an Address to the Throne, they do not *uncover themselves* but are *uncovered by the officers of the Court.*

Mr. Commissioner Holroyd ought to have had the good sense to imitate such an example, and not to have obliged the Quaker to take off his hat. Why did he not direct the officer to take off, in a way not offensive, the hat of the individual, who considered, that, in taking off his hat as an indication of respect, he exhibited a degree of homage, which he could justifiably exhibit to the Supreme alone.

But Commissioner Holroyd is most likely of such a philosophic turn of mind as to be free of all weakness, all childish superstitions of this nature! But then Commissioner Holroyd should, from the same elevated philosophic mental condition, have allowed for the difference of opinion in others: and this should have made him avoid seeking from any individual a token of respect, which that individual could conscientiously give to the Divine Being alone.

It is true Commissioner Holroyd makes use of the absurd rea-

soning, embodied in the phrase "At Rome, do as Rome does;" that is, if, in the company of the devil, we must do as the devil does: in other words, to quote the Commissioner's own words, "*If the party came there he must conform to the rules of the Court.*" This reasoning the philosophic mind of the Commissioner should have perceived at once to be erroneous. If a man goes *from choice* into the devil's company, he might expect that then he would be bound to do as the devil does. "If the party came there he must conform to the rules of the Court," argues the Commissioner, as if the coming there was a matter of choice. It is a matter of *necessity*. If the Quaker had come into the Court as a matter of *curiosity*, then the Commissioner *might* be permitted to state, and to enforce, what he did.* But he should remember, that the people, of which the Quaker is one, by their representatives, constituted the law which authorizes the Court over which he presides, and which authorizes the Commissioner to *receive his salary*. And, also, that the people appointed the Court, not to make *rules of Court* to take off hats from those who keep hats on for conscientious motives, but to do *justice in matters of bankruptcy*. And the Commissioner should have remembered, that the law further *requires* that creditors *should attend* at the Court for the promotion of justice in respect to matters of bankruptcy. The Quaker's coming there was not, therefore, a matter of choice but of necessity.

But the Commissioner may observe, "*He may stay away if he cannot take off his hat. He is not obliged to come.*" But he is obliged to come, we have endeavoured to show. The law has appointed that he shall prove his debt before Mr. Commissioner Holroyd or some other Commissioner.

"*Yes*," but Mr. Commissioner Holroyd may add, "*you need not come; you can stay at home and lose your money or your right.*" But what right has the Commissioner to make the decision of a man's conscience the ground upon which his pocket should be picked.

We have much doubt if the Quaker could have been obliged to *take off* his hat; and hope that some staunch advocate of the view, that, *taking off the hat is a token of respect to be given only to the Supreme*, will try the right with this or some other Commissioner.

Reference to the above circumstance has been made, not with the view of exhibiting Mr. Holroyd in an unpleasant point of view; but for the purpose of showing how self-esteem leads men to forget the organ of conscientiousness in others; in other words, how the violation of the law, "Whatsoever ye would that men should do unto you, do ye also unto them," is attended with injury. Why, in conclusion, should the Quaker's conscientious feelings be violated by the rules of any Court? Are not the conscientious feelings of the Quaker as influential as Mr. Commissioner Holroyd's rules of Court feelings?

---

* A legal friend who perused the manuscript of these few remarks, says, "You concede too much in this. We have a right to *know* how the law is administered

REPORT OF THE FINSBURY DISCUSSION SOCIETY.

In the last Number a notice was given of the Stratton Literary Institution. In this is contained the Report of a Society, which, it is pleasing to relate, was founded upon the broad principle of discussing *all* kinds of truth, *moral*, *political*, *scientific*, and *religious*. It is so rare to find a Society taking so exalted a position: daring to venture upon subjects, which, unfortunately, too often excite angry feelings, that we feel considerable pleasure in publishing the following Report, hoping that the same will disabuse the minds of many of the notion, *that politics and religion cannot be discussed with temper* or with benefit.

The Second Annual Report of the Finsbury Discussion Society.

The revolution of time having again brought the Members of the Finsbury Discussion Society to the commencement of a new year, and to the season at which (in accordance with its rules) the Annual Meeting for the election of officers and the transaction of other business is held, it becomes the duty of those who have been entrusted with the management of its affairs, previous to resigning the offices they now hold, to present a brief report of the proceedings of the Society during the last year.

This duty your Committee feel great pleasure in discharging, because a retrospective glance at the transactions of the past year fully justifies them in stating, that the Society keeps steadily progressing on the line of improvement, and is daily acquiring a degree of respectability and importance, which, considering the short period it has been in existence, far exceeds the most sanguine expectations of its best wishers.

Scarcely more than eighteen months have passed away since a few individuals, feeling desirous of benefitting their fellow men by affording them an opportunity of expanding their intellectual faculties, first formed themselves into a Society, in Providence Hall, Finsbury Square, for the purpose of holding meetings for mutual discussion, and the delivery of lectures, upon all subjects calculated to promote the happiness and the well-being of mankind. Rapid has been the progress the Society has made in public opinion, (owing to the liberal basis on which it is founded, and the sound principles on which it is conducted) and great have been the numbers from the east, west, north, and south, who have availed themselves of the opportunity of participating in its benefits; so that, notwithstanding the defection of many who joined it during the first six months, simply on account of its novelty, and who left when that impression wore off, and the loss of many others, who, from unavoidable circumstances, have been obliged to relinquish the privilege of being connected with it, the Finsbury Discussion Society has, at the present period, one hundred efficient Members on its books, all desirous of obtaining, and many of them from the

superior abilities with which they are endowed, fully capable of imparting, useful knowledge.

The means which this Society employs to accomplish the grand object it has in view, are, as has been before observed, *mutual discussions* and the *delivery of Lectures.* In order to show that the time of the Members has not been wasted in unprofitable discussion upon speculative and visionary theories; but, that, on the contrary, every subject brought under their notice, has had a direct reference to some point of practical utility, your Committee beg to call your attention to the following lists :—

Lectures delivered during 1835.

On Digestion	by Mr. Davis
On the Seed of Plants	John Epps, M. D.
On Oxygen Gas.	Ditto
On Botany	Ditto
On Hydrogen Gas.....	Mr. Davis
On the Language of Symbols	Mr. Henning
On Caloric	John Epps, M. D.
On the reciprocal Duties of Nations ..	Mr. Scoble
On the Duties of the Married Life ..	Mr. Priest
On Angelic Ministrations	Mr. Henning
On Sea-Burking	John Epps, M. D.
On Caloric	Ditto

Questions discussed during 1835.

What evidences have we that the Scriptures are a revelation from God?

What is the duty of the British nation towards the apprenticed labourers in the West Indies?

In what way ought the Lord's day to be observed?

Is the imposition of Tithes, on agricultural or any other produce, consistent with the principles of Christianity?

What influence have the Taxes on Knowledge upon the social, moral, and political condition of Society?

Is passive obedience, implying thereby total indifference to politics, the duty of Christians?

Would it promote the national welfare, if the Education of Youth were provided out of the public funds?

Is Machinery beneficial or injurious to society in its present state?

Which is the best form of Government, limited monarchical or republican?

What proofs are there of a future state of eternal reward and punishment?

This list, your Committee consider, presents a sufficient proof of the utility and the importance of the Society, as every one will immediately perceive that the great variety of arguments elicited by the discussion of such questions must be highly beneficial, inasmuch as it will materially tend to expand the views and enlighten

the minds of the Members, and thus enable them to form much more correct opinions on subjects so intimately connected with, and having such a direct bearing upon, their interests, as members of the community at large.

In referring to the *manner* in which the various questions have been discussed, your Committee have the high gratification of being able to state, that it has been alike characterized by talent and gentlemanly courtesy; and, that, notwithstanding many conflicting opinions have been advanced, and some warmth of temper existed during the discussion, nothing has arisen to disturb the harmony and good feeling of the Society; but each Member has manifested a spirit, which shows that the end he had in view in entering the arena of debate, was not the mere display of his own abilities, or the pleasure of defeating his opponents, but the far nobler object of seeking to arrive at a just conclusion respecting the subject under enquiry.

Such a spirit, your Committee trust, will long continue to animate the breasts of their brother Members, and that however warmly they may defend their own sentiments, they will ever remember that difference of opinion should never lead them to forget the respect due to an honourable opponent, or be allowed to destroy that kindly feeling which ought to subsist between Members of the same Society.

The next point of peculiar interest to which your Committee have to allude, is the establishment of a Library for the use of the Members, which, though it has been in existence but a few months, already contains about one hundred volumes, all presented to the Society by various Members connected with it.

The establishment of a Library your Committee cannot but hail as a grand epoch in the history of the Society, and one the result of which will be productive of incalculable benefit, as it will afford those Members who do not possess libraries of their own, great facilities in acquiring knowledge on many subjects of which they would otherwise remain ignorant, and thus render them more efficient and useful Members of the Society.

Your Committee, considering this to be a point of the highest importance, earnestly entreat their brother Members to use all the influence they possess amongst their private friends, as well as with those who are in the habit of bestowing donations of books upon Societies of a similar description, for the purpose of increasing the number of volumes already presented. To effect this desirable object, several of the Members have voluntarily come forward, and agreed to give an additional quarterly subscription, to be applied solely towards the support of the Library. This example, your Committee feel convinced, needs only to be better known in order to be more generally followed, and they therefore strongly recommend all their brother Members who can afford it, to "do likewise," as without some assistance of this description, the number of volumes contained in the Library will be but few, and the advantages derived from it comparatively small; whereas, by the addition of a trifling voluntary quarterly subscription, a fund will be pro-

vided, with which standard works of general utility may be purchased, and the Library thus made much more useful than it otherwise can be.

For a more detailed account of the state of the Library, your Committee beg to refer you to the Librarian's Report; suffice it on their part to say, that the growing desire for knowledge, which pervades the Members, has not allowed the office of Librarian to become a sinecure, or the books already bestowed to remain on the shelves, enveloped in cobwebs or covered with dust; but that each succeeding Wednesday evening has witnessed the Members repairing to the Library for the purpose of selecting some volumes, which will enable them, when at home, to increase the amount of intellectual food they have received whilst listening to the lecture or discussion.

Another point worthy of notice, connected with the proceedings of the past year, is the publication of the *Anthropological Magazine, or Christian Physician;* which, although it does not exclusively connect itself with this Society, but seeks to promote the interest of mankind at large, may yet be considered as having first emanated from it, or, to use the language of Dr. Epps, "may be looked upon as the child of the Finsbury Discussion Society."

Your Committee consider the establishment of this Magazine will be of essential benefit to the Society, inasmuch as its columns will be ever open to the Members, and will occasionally notice their proceedings, thus giving that degree of publicity to the Society, which it only needs to be more highly appreciated.

Viewing it in this light, your Committee feel bound to impress upon you the necessity of supporting it; indeed, they consider it is your duty so to do, for being your offspring, it becomes you to watch over its childhood, to assist in the expansion of its faculties, both by your intellectual and pecuniary aid, to advance its interests through all the intermediate stages till it arrives at perfect manhood, and by every means in your power, to encourage and strengthen its efforts to diffuse the blessings of knowledge, and to extirpate the hydra-headed monster, ignorance.

The last point to which your Committee beg to direct your attention, is the state of the Financial department.

At the outset of every Society there are difficulties to encounter, which, generally, cause its disbursements to exceed its receipts. Such was the case in the present instance, and hence, at the end of March last, your Committee found that the Society was in debt to the Treasurer about £10. From this difficulty, however, they were soon relieved by the handsome offer of your President, who, in a letter addressed to the Society, stated, that if the Members would lend their assistance, he would deliver a course of Lectures on Phrenology, for the purpose of cancelling the debt.

This proposition was met by the Members in the manner it deserved, and thus, at one and the same time, the usefulness of the Society was extended by removing the incubus which had hitherto confined its operations, and the knowledge of its Members increased

by the interesting information conveyed to their minds through the medium of the above Lectures.

From that period up to September last, the income of the Society was sufficient to meet its expences, but on making up the accounts to Christmas, it was found that there would be a deficiency of about £2. Several of your Committee on finding this to be the case, brought the subject forward at one of their meetings, and stated that, in their opinion, the rental of the lecture-room was too high, when, after a lengthened discussion, it was agreed to offer the proprietor a less rental for the ensuing quarter. The foregoing resolution was communicated to Mr. Henry, who declined making any reduction in the rent, but expressed his willingness, as the Society was in debt, to give a donation of Two Guineas towards discharging it. This offer your Committee thankfully accepted, and, consequently, at the present time there is a small balance in favour of the Society.

Your Committee cannot close the Report without expressing their grateful acknowledgments to John Epps, Esq. M. D. for his liberal conduct in discharging the debt before referred to, for his kindness in delivering the above-mentioned Lectures, and for the readiness he has at all times evinced to exert his talents for the benefit of the Society.

In conclusion, your Committee have only to add, that the past success which has crowned the exertions of the Members, notwithstanding the difficulties they have had to encounter, coupled with the cheering prospects which now present themselves, fully warrant the conclusion, that, at no distant period, the Finsbury Discussion Society will occupy a proud position on the muster-roll of the Literary and Scientific Institutions of the metropolis.

Drawn up by order of the Committee by

C. LOOSELY, Secretary.

PHRENOLOGICAL INQUIRY.

Sir,

I would be glad to be informed, through your very useful publication, what organs the phrenologists consider are brought into activity in methodizing and combining ideas, so as to give facility in speaking, or in written composition, and what discipline you would recommend to improve the power when deficient; and whether you consider the study of logic* useful in improving the reasoning faculties. The purpose of your Magazine being to extend a knowledge of phrenology, I hope this inquiry will not be considered intrusive; and your directions as to the best mode in which to obtain the improvement required, will particularly oblige, your's, most respectfully,

A SUBSCRIBER.

Dec. 22, 1835.

---

* An answer in part will be found in the Essay on Phrenology in this Number.

PHRENOLOGY, BY JOHN EPPS, M. D.

Essay VI.

In the last Essay, the second division of the intellectual faculties, entitled the *relative*, was considered. In this, the remaining division, the Reflective faculties will be examined.

These faculties are called *reflective*, because their offices seem to be to draw out certain *conclusions* from the facts, and the relationships of facts, accumulated by the perceptive and the relative intellectual faculties. Having ascertained the existence of bodies by the perceptive powers, and the relationships in which those bodies, thus existing, bear to one another by the relative powers, the mind naturally seeks to ascertain the bases upon which these relationships rest, in other words, the *causes*. The faculties, which constitute this natural tendency of the mind, (and who will deny that this is a natural tendency of the mind) are those which are now to be noticed.

These reflective faculties form the uppermost tier in the forehead. The perceptive, forming the lowermost tier: the relative, the middle tier: and the reflective, the third tier.

One of the first operations of the mind, after perceiving the facts and their relationships, is to notice the similarity between certain facts and phenomena. Children exhibit this disposition very early in life. They seem to be delighted in observing the similitudes of things. They illustrate their views by comparisons. And, in after life, the exhibition of this tendency is as constant. It might therefore have been inferred that some organ, connected with this particular power, exists in the human brain.

Dr. Gall was led to the discovery of this particular organ by the following circumstance. In reasoning on philosophical subjects with a man of great talent, he observed, that, when this person was at a loss to explain himself, he had recourse invariably to a comparison. This characteristic feature led Dr. Gall to examine the philosopher's head. He observed a great prominence in the central part of the uppermost tier of the forehead. This struck Dr. Gall, and he was induced to examine other individuals. In two ex-jesuits, celebrated preachers, and noted for the use of brilliant comparisons and analogies, the same protuberance was evident. This led to further observations, and Dr. Gall, in a short time, became fully convinced of the existence and of the situation of this organ, which he called the *organ of analogy*.

This organ is now called the organ of Comparison.*

It is an organ which is the most frequently developed among the reflective faculties: and hence appeals to it are so very suc-

* Marked No. 30.

cessful. The most captivating speakers are those who use comparisons. And it is a most striking testimony of the truth, "That Christ needed not that any one should tell him what was in man, because he knew already," that, in His instructions, he perpetually appealed to this faculty. "He spake unto them in *parables;*" in other words, he made appeals to that one of the reflective organs, which he knew was most largely developed in the human head.

Mr. Combe gives very accurate distinctions by which the functions of this particular faculty can be known. "Tune," he observes, "may compare different notes: colour contrasts different shades: but comparison may compare a shade and note, a form and a colour, which the other faculties by themselves could not accomplish."

This organ is very large in Thomas Moore, the celebrated poet of Ireland. It is large in Pitt's bust. In Dr. Chalmers and in Burke it is very large: and any person acquainted with the writings of these men must be convinced how strikingly the manifestation and the organization are accordant. It is large in the cast of the skull of Rowland Detrosier. It is large in the mask of Benjamin Franklin, and, every one, who has read poor Richard, must have perceived the prevalence of the condition of mind connected with the existence and the activity of this faculty.

But the mind, it is well known, does not feel satisfied with the mere production and the discovery of comparisons, there is a strong desire to know the *causes* why certain things appear to have a similarity, and others, a dissimilarity. This strong desire could not have produced itself. The Creator must have imparted some power or powers, otherwise this desire could not have originated.

Dr. Gall had long observed that men, noted for strong, philosophical reasoning powers, had the upper part of the forehead very prominent. He found that these who took delight in penetrating into the depths of essences, and other matters, generally considered to pertain to the study of metaphysics, had the same development.

Further observations have led phrenologists to the conclusion that the part of the brain, situated on each side of the organ of comparison, has attached to it a function which induces individuals possessing it large, to inquire into the causes of things, and hence this part is called

The organ of Causality.*

This organ is large in Kant, in Franklin.

Dr. Spurzheim thus briefly pourtrays the part that this faculty performs in a philosophical understanding. "The faculty of individuality makes us acquainted with objects and facts: the faculty of comparison points out their identity, analogy, or difference; and this faculty desires to know the causes of all events. Consequently these three faculties together form systems, draw conclusions, induc-

* Markod No. 31.

tions, or corollaries, point out principles and laws, and constitute the true philosophical understanding." Indeed, it may be added that the perceptive and the relative powers are useful in collecting materials; they are the quarrymen, who go into the quarry of nature and of revelation, and dig thence the precious stones: they are the beings who collect the pebbles on the shores of the great ocean of truth; but the reflective powers are they, who, contemplating and taking possession of the materials, thus quarried, deduce general truths and doctrines, and enable man to ascend to the contemplation of the laws, which regulate the phenomena of the universe.

It is quite evident to the common observer that some persons are more *witty* than others. Some are almost always laughing: they are pleased with observations which do not excite the risibility of other men, and some have a very quick perception of any thing ludicrous.. They often are not endowed with powerful causality but are simply witty.

Individuals, who are witty, are found to have the part, situated outside of the organ of causality in the same tier, largely developed. This part has therefore been known as

The organ of Wit.*

Most phrenologists place this organ in the group of those belonging to the sentiments; because its functions seem to bring it more under the character of a *sentiment* than of an *intellectual power*.

This organ is large in Sterne, Voltaire, Henri Quatre.

Persons having it large are fond of jests, irony, and, when destructiveness and secretiveness are large, of sarcasm and mockery. They often laugh at other persons' expence: would destroy a friend rather than lose a good joke.

It may be advantageous to notice why it is considered here along with the intellectual powers.

It seems to the Essayist, that Mr. Hawkins opinion, that the organ of wit in its function corresponds to the *interjection*, is correct. This organ appears to be called into activity when conclusions are to be formed. After the facts have been collected by the perceptive and the relative powers: after the analogies and the connections of these facts have been ascertained by the organs of comparison and causality, then the mind passes to the condition of a conclusion, and the interjection, "Ah! yes! true!" escape as utterances of the agreeable condition connected with the arrival at the conclusion.

Laughter is nothing more than a *series of interjections* strung together, thus, ah—ah—ah—ah—ah—ah—ah—ah—ah—ah—ah, distinct interjections, will, if united together by rapid utterance, be a laugh.

In the manifestations of wit the following circumstances are observable. That when we are affected by any thing ludicrous, there

---

* Marked No. 32.

is either a perception of *incongruity where congruity* was expected, or a perception of *congruity where incongruity* was expected. The mind, on perceiving the unexpected nature of the conclusion, to which it is thus led, is affected ludicrously, and this capability of being affected seems to be dependent upon the existence of the organ of wit.

Thus in taking a newspaper and reading it across the most ludicrous effects are produced. Thus—

" The sword of state was carried "

" Before Sir John Fielding and committed to Newgate :"

Again. " One of his Majesty's principal Secretaries of State "

" Fell off the shafts, being asleep, and the wheels went over him."

Again. " He was examined before the sitting magistrates "

" And no question asked."

When any one reads these he is induced to laugh, and why? Because he expects that there will be congruity between the parts of the sentence, and finding so great an incongruity he is astonished, and, thus his organ of wit becoming affected, he utters the interjections of laughter.

It would thus appear that the organ of wit forms as it were the connecting link between the *intellectual* powers and the *sentiments*. It seems to partake of an intellectual power so far as the perception of conclusions is concerned : and it partakes of the character of a sentiment in having a feeling of gratification connected with the perception.

On these grounds it is placed in this Essay where it is.

PRACTICAL REMARKS.

Practical Remark, 1.—The most instructive lesson to be drawn from the facts connected with the history and the situation of the faculties is, that as the Creator has arranged them in a certain order, it is quite evident that these faculties must be educated according to the order in which they are arranged. Thus there are the organs of the senses, the eyes, the nose, the tongue, and the ear, situated *in the face*. These receive the impressions of external objects. Then come the organs of the intellectual faculties, situate above in the *forehead*. Of these there are three divisions, or tiers: the *perceptive* powers occupying the inferior tier; the *relative*, the middle tier; and the *reflective*, the uppermost or third tier. It is quite evident thence, that, in education, the order must be that here pointed out. The mind of the child must be stored with *existences* and the *properties* of existences, (taken notice of by the perceptive powers); the relations, which existences bear to each other, (taken notice of by the relative powers); and *then*, the reflective powers may be beneficially called into activity, having materials on which they can exercise themselves.

Hence the absurdity must be apparent of teaching children *abstract truths*, either in science, morals, or religion. Children should be taught *facts* regarding the Deity, whether as the God of nature or as the God of revelation. Store the infantile mind with these, and

pray allow that mind to draw its own conclusions, when it is capable of doing so.

Hence the importance of *infant* schools, where the young mind is encouraged to gratify itself in the acquisition of a knowledge of things: and hence, in addition, it happens that these infant schools are most successful where the teachers are most capable in communicating the knowledge of *facts* by their mode of instruction.

The reflective powers, in conclusion, are to be viewed as the architects engaged to use the materials the other intellectual powers have collected. But as the architect, however talented, could never build a substantial house without materials, so the educationist can never make a lasting intellectual fabric without an abundant supply of the materials which the perceptive and the relative powers bring. The two great evils are, that some men wish to be architects before they get materials: and some men are so engaged in getting the materials, that they despise the architects: some men are too fond of *theorizing*, others are too much confined to *mere facts*.

And here, it may be proper to refer to *logic*, as a means of developing the intellectual powers. True logic is nothing more than a collection of those *rules* which men of mind have observed common sense to follow in investigating the operations of thought. The details of the rules of logic is therefore a discovery of the processes that have been useful in mental operations. But it is quite evident, that a person, in studying logic, may fall into the same error as persons do in learning grammar, they learn the rules of grammar without understanding them: and then, having learned them, are prevented by the conceit, produced by this learning, from ever understanding them. So with logic: many know the rules of logic; but know nothing of the strong common sense of which logic is, in the outset, the guide, and, afterwards, the strengthener.

Logic is an appeal to all the intellectual faculties when properly managed. Since the logician proceeds from *facts to general principles* and *also from general principles to facts*: that is, in the first instance, he makes the *perceptive* powers minister to his *reflective*: in the second, the *reflective* to his *perceptive*. Now, it follows, that, in a man who has *small perceptives* and *large reflectives*, we should cultivate those modes of logical reasoning which would make him proceed only from facts to general principles, as thus we should cultivate his deficient perceptive powers. And, with the opposite development, we should adopt the opposite mode of logical examination.

Practical Remark, 2. As all human beings, except the idiotic, possess all these faculties, all human beings, the unprejudiced mind must perceive, have a right to the exercise of these faculties. For it is quite certain that every power which the Creator has given, was bestowed to afford to the possessors the gratification that is connected with the exercise of the power. Every being therefore has a right to seek every opportunity to exercise every intellectual power. The very circumstance of his having been created *man* is the guarantee to his right: and every state of society, which pre-

vents or throws any barrier in the way of the exercise of man's intellectual powers, is a state of society opposed to the will of the Creator. This truth phrenology holds forth; consequently, the tendency of phrenology is most exalted! because it teaches in the hand-writing of the Creator, inscribed on the human head, heaven's own will that every man should have every opportunity to exercise the faculties God has given him; and, that, no state of society can be considered as accordant to the will of the Creator, which does not, by its constitution, ensure to every man the opportunity of gratification for all his intellectual powers.

Practical Remark, 3.—That the existence of the organ of comparison as large, in most heads, teaches us the truth, that, through it the other faculties of the mind should be called into activity. In noticing this, it is, however, equally necessary to remark, that the activity of this organ is the source of numerous intellectual errors. Thus persons with large comparison are very apt to be led astray, by the influence of this organ inducing them to perceive the resemblances of things and not their differences. They therefore argue very erroneously from analogy: and, because most men have large comparison and moderate causality, they pass off for very clever men and powerful exhibitors of truth: and, in argument, very generally get the victory because persons will not have the patience, while the opponent detects the fallacies of the argument by detecting the points in which the comparisons, made use of, do not bear upon the question under discussion.

THE HUMAN BODY. ESSAY VI. — *Motion. Muscular System. Nerves. Motive Power. Muscle the receiving vessel. Muscular contraction. Muscular exercise essential to health.*

IN the Essays connected with the investigation of the *human body* and the uses of the parts of the same, contained in the preceding Numbers, the process of digestion has been explained; and it is hoped in so intelligible a manner as to render the particulars of that important process clear to the readers.

The intention is to go through the whole of the human body, and thus to make the Magazine a connected whole of useful information that can be applied to the purposes of life.

In this Number it is proposed to consider that part which is called The MUSCULAR SYSTEM.

On beholding the various individual things existing in creation, the human mind is struck with several prominent circumstances. Thus, the total incapability *of motion* on the part of those bodies belonging to the *mineral* kingdom; the imperfect nature of the motion performed by the individuals belonging to the VEGETABLE kingdom; the freedom of motion, possessed by the individuals belonging to the ANIMAL kingdom, arrest the attention of the most casual observer.

Though such circumstances have excited the notice of almost every one, few, perhaps, have inquired what are the circumstances, the conditions, upon which the power, possessed to so surprising a degree by animals, of motion from place to place, is dependent. Ignorance upon this point is general: and ignorance in this, as in other cases, have been attended with injury, as many persons have injured the power possessed, because not aware of the conditions under which that power is to be beneficially exercised.

In this Essay an attempt will, therefore, be made to dispel the ignorance; to point out the nature of the system, upon which the actions of the body are more directly dependent; and, thus, to open up the conditions, under which this system should be called into, and kept in, activity. The effect of which will be, it is hoped, to induce those who understand to obey the laws which the Creator has appointed for the regulation of this part of the human machine, ever remembering that obedience and happiness, disobedience and misery, are intimately allied.

The power of motion in animal bodies is dependent upon those parts, which, on removing the skin, are seen, and are generally of a red colour, and having the spaces lying between them filled with fat. These parts are called MUSCLES; in common language *flesh;* and the whole, grouped together and viewed as a whole, are designated under the name of the MUSCULAR SYSTEM.

A muscle may be viewed as a number of small *fleshy threads*, joined together by a network, called *cellular* substance. The muscles are very numerous, although when cutting a joint of meat the flesh seems to be formed into one mass, the mass can, by dissection, be separated into *distinct muscles;* each being separated from its neighbour by fat and by cellular substance; and each having its *own peculiar duty* to perform, which no other muscle can possibly perform for it.

Each muscular thread may be regarded as a depository of a *particular power*, which, on a *stimulus* being applied, is called into activity, and causes the thread to *contract.* This power is generally designated by the title of *irritability.* The stimulus having ceased, the muscle recovers its original condition; that is, its contraction ceases.

How then, it may be asked, *is this irritability supplied? To what extent can this irritability be drawn upon?* And how *does the contraction* of the muscle, dependent upon this irritability being excited, occasion *muscular motion.*

These questions are highly interesting, and answers will be afforded in the following pages.

This irritability is dependent for its existence and proper manifestation on two circumstances: first the *nerves*, and second *healthy muscular fibres.* The nerves seem to be the fountain whence the supply of nervous energy is afforded. Indeed, in the dissection of various beings it is found, that, just in proportion as the motions which muscles perform are complex, just in proportion are the nerves numerous and complex also. The nerves, therefore, supply the *motive* power. The muscles are the vessels for receiving this

power. The condition of the muscles is, therefore, an essential to the proper, the healthy, manifestation of the motive power. The stream may be good, but the vessels containing the stream, may be unsound. Hence it becomes of importance to ascertain the conditions, under which the muscular system should be exercised, in order that the muscular fibres may be in the best condition both to receive and to manifest the *motive power*.

In order to understand this more satisfactorily, it is necessary that a muscle should be more fully explained.

Muscles are attached either to the *bones* or to some some part immovable, or nearly so. The two points at which the muscle is fixed to the bones are called its *origin* and *insertion ;* and, at these points, the muscle is, as it were, puckered up into a narrower compass, thus occupying less space than does the *central part* of the muscle, which is called the *belly*. Indeed, in most cases, the muscle is contracted at its insertion to such a degree, as to be converted into a silvery-like substance, having the form of a cord, such as is seen in the legs of birds; these cords being called *tendons*. The corded or narrow character they assume, is exhibited by the name *strings* being given to them. Thus persons speak of *ham-strings*.

A muscle, consisting of these three parts, namely its *origin*, its *insertion*, and its *belly*, is, therefore, the vessel which receives the motive power. To receive it comfortably and to manifest it satisfactorily, and with gratification, the muscle must be in a healthy state. The threads, composing it, must be in the condition of being well-formed and properly supplied with *blood*, and that blood of a healthy character. The blood cannot be good, unless digestion is good; and digestion cannot be good unless proper food be supplied, and, when supplied, unless the various processes of digestion, noticed in the preceding Numbers, perform their duties effectually in the conversion of this food into good chyle.

The muscles being in this healthy condition, the nerves communicate to it the power of motion; and, whenever a stimulus is applied, the muscle will contract, and being fixed at its insertion and its origin, it is evident that its contraction must move the part to which it is fixed.

The irritability with which the muscle is endowed can therefore be acted upon. It can be called into a state of activity: contraction of the muscle is the result; and this contraction is attended with considerable benefit. Indeed, without muscular action health could not exist.

Muscular action is, therefore, essential to health.

Persons therefore, who do not call the muscles into activity, cannot be expected to have health.

On the other hand, some may, from their circumstances, continue the muscular action to a too great length of time. It may act with a too great intensity.

Under both circumstances, namely, the *want* of, and the *excess* of, muscular exercise, the law appointed by the Creator for the ensuring of human health is violated, and, being violated, punishment must follow.

It will, therefore, be useful to refer to the conditions of society under which these violations occur: to point out wherein these violations consist: and then to derive from the fact, *that these are violations of the Creator's law*, a powerful ground of appeal to mankind to alter the conditions and the practices of society, which justify and oblige these violations.

In noticing these subjects it will be the Essayist's duty to show the miseries which occur in *high* life from these violations; to detail in the effects upon our *working population* the miseries from these violations in regard to this class; and then, having detailed these, to notice the means to be devised for the removal of the evils specified. And, under this last point, the aid to be derived from gymnastics will be declared, in which the promised aid of an Old Gymnast will be very acceptable.

THE CORNISH MOTHER'S LAMENT.

They say 'tis a sin to sorrow—
That what God doth is best,
But 'tis only a month to-morrow
I buried it from my breast;

I know it should be a pleasure,
Your child to God to send,
But mine was a precious treasure
To me and to my poor Friend!*

I thought it would call me mother
The very first words it said,—
Oh! I never can love another
Like the blessed babe that's dead!—

I shall make my best endeavour
That my sins may be forgiven;
I will serve God more than ever
To meet my Child in heaven!—

I will check this foolish sorrow
For what God doth is best;
But oh! 'tis a month to-morrow,
I buried it from my breast!

Beauty is the perfection of every individual according to its nature, whatever that nature be. Hence a dog may be beautiful. So may a monkey. So may a lizard.

---

* The term for Husband in this County.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

MARCH 1, 1836.

OBEDIENCE AND HAPPINESS—DISOBEDIENCE AND MISERY.—DOUBTS BY A. B.

To the Editor of the Anthropological Magazine.

Sir,—I have read with much pleasure, and, I trust, with considerable benefit, the Essays upon Obedience and Happiness, and Disobedience and Misery; and, according to my opinion, the Essayist has clearly demonstrated that the miseries described are entirely dependent upon the violation of the Creator's laws: these laws, in addition, the Essayist has proved, being intended for the promotion of human happiness instead of human misery.

So far the unprejudiced mind must agree with the Essayist, and it is quite evident also that the most important conclusions and the most beneficial results will arise from the general recognition of the views laid down. But then ought we not to hesitate in giving our unqualified assent to the proposition, that "obedience and happiness, disobedience and misery, are essentially connected," when the testimony of an apostle can be brought forward to the following effect, "Yea, and all that will love godly in Christ Jesus shall suffer persecution," 2 Tim. iii. 12: And, when to this testimony that of the apostle's Master is added, "I came not to send peace on the earth, but a sword," and that "he came to set father against son, and the daughter against the mother, and the daughter-in-law against her mother-in-law." Matthew x. 35?

And, when to these statements, are added the *facts* that prove incontestibly that the *good*, that is, those who obey the law of love to their neighbour and their God, have been persecuted, ought not we delay in giving our assent to the proposition?

For what does all history teach? What but this truth, that the good have had misery and death their portions? What thousands of Christians were sacrificed in the earliest ages of Christianity by the pagan emperors: although Pliny could point out nothing bad regarding them, except that they sang hymns to one Jesus. How many has the papal tyranny slaughtered? The Waldenses and the Albigenses, the most harmless people, were murdered, merely because they loved to read the Scriptures, and worship God with freedom.

Look, too, at the *patriot*, he who has struggled for the liberties of

his country. Does not history testify that his reward has been imprisonment, confiscation, torments, death?

I need not add illustrations, they are so well known. I shall, therefore, be glad to have some explanations of the passages quoted and of the facts referred to, in connexion with the proposition, that obedience and happiness, disobedience and misery, are connected together.

A. B.

London, February 1, 1836.

In the next Number, if possible, the explanations requested will be given; when it will be shown both that the persecution is not the effect of the belief in Christianity, and that the sword is not a companion of Christianity, but that Christianity, in producing the glorious results for which it was introduced into the world, has to wage a war against those feelings of our nature, called the *animal*, in the noble attempt, not of attacking them, but of raising the *higher*, the *moral* and *religious* feelings of man, prostrated at the footstool, to the throne.—Editor.

DESTRUCTION OF HEALTH IN HIGH LIFE, IN CONNEXION WITH THE MUSCULAR SYSTEM.—OBEDIENCE AND HAPPINESS—DISOBEDIENCE AND MISERY.

In the last Number, (pages 141, 142, 143, 144) an account of the muscular system was given; in which it was shown that the muscle is endowed with a peculiar power, called *irritability*, which, on the application of a *stimulus*, causes the muscle to *contract;* the contraction being followed by a state of repose to the muscle, called *relaxation*. It was further shown, that, for the enjoyment of *health*, it is necessary that the muscles of the body should have a certain number of contractions and relaxations every day: and that disease results both when the muscles are called *too much* into activity, and when they are not called *enough*.

In *high* life the muscles are not sufficiently called into activity. In the *lowest* classes of society they are often too much worked; and hence diseases attend both extremes.

At the outset of the observations now to be made, it may be remarked that, when a muscle is exercised, an increased flow of blood takes place to that muscle. This establishes a healthy kind of circulation through the body, and thus relieves the individual from diseases which are connected with an impeded circulation of this important fluid, through any particular organ or organs. Without this increase this free circulation cannot exist; and health, therefore, must be absent.

The effect of exercise in giving strength, and, at the same time, occasioning an increased supply of blood to the muscles exercised, is evidenced by the great difference in the colour of the flesh of

poultry and of *game*. The flesh of the former is *pale;* the flesh of the latter is *red*. And even, of the flesh of poultry, the parts of the body which are principally used, and which man cannot clip, namely, the *legs*, are darker in colour than the *wings* or the breast, which the bird can use only partially from the injury inflicted on the wings.

In order for the enjoyment of health, it is repeated, it is absolutely necessary that the muscles of the human body should be exercised; and that this exercise consists in the *contraction* and the *relaxation* of the muscle, alternating with one another.

The muscles, it should be observed, are attached to the *bones* of the body, which form, as a whole, the *skeleton*. This skeleton would not stand erect if placed so. It would fall to the earth. The muscles, therefore, supply the power by which the skeleton, and the parts attached thereto and contained within are so balanced as to keep the body *erect*. This power, in preserving the body erect, is exhibited very strikingly in the effects of intoxicating liquors; these taking away, by their action on the nervous system, the power of the individual over his muscles. The man falls to one side, then to the other, and, finally, on the ground; or, if not falling, he is obliged to lean against a wall, or pillar, or some supporting body, which serves, by its pressure, to compensate, to a certain extent, for the loss of the power over his muscles.

When, therefore, an individual *stands erect* he has to keep in a state of almost *permanent contraction* the greater number of the muscles of the body. When a person *sits upright*, he has to keep in a state of contraction the greater number of the muscles of the *trunk* of the body. If, therefore, he continues the standing or the sitting posture for a lengthened period, he must bring his muscles into an unnatural state, because keeping them in a state of contraction, without, at the same time, allowing them the benefit of relaxation.

If these remarks be applied to the practices in the higher circles of society, it will be found that many of these practices are in violation of the law of the Creator, which has appointed that *alternate contraction and relaxation of the muscular fibre is essential to health.*

To refer to a few illustrations.

The young lady is taught that she must sit *upright*. She is not allowed to recline back in her chair. In fact, most nurseries are now ornamented with tall chairs with straight backs; that is, if they have backs at all. To sit upright the muscles, as was stated, must be in a state of constant contraction. The muscles become fatigued. Nature demands relaxation for them; and the child reclines, or bends forwards, and seeks to obtain rest. "Sit erect, Miss," is the command of the ignorant but dogmatic preceptress. Another attempt is made to sit upright. Nature becomes exhausted; and, when the time for relaxation occurs, the child, by the exhaustion already produced, is rendered unfit for the exercise, which might have done good by the variety of which it consisted.

But even supposing the child is capable of taking this exercise after the fatigue attendant upon the erect position, she is not allowed to exercise generally and freely the muscles of her body. She is not allowed to *romp*, that would be *vulgar*. She is not allowed to *dance*, that would be *wicked*. She is not allowed to *run*, that would exhibit her legs, and that would be *rude*. She is not allowed to toss and swing her arms, the people will say, You are *mad*. No, she must walk as straight as she sat. She must not smile, for fear some young gentleman should imagine that she looked at him, and that would be quite opposed to the rules of school. In fact, she must be demure and staid: she must banish the buoyancy of youthful health and assume the stiffness of the venerable Madame, to whom her destinies for a few of the most precious years of life have been entrusted.

She returns home after her hour's walk, and then the *accomplishments* of *drawing* and *music* complete the work of destruction. The muscles of the back and trunk are fatigued, and to obtain relief, the unfortunate one leans on one side, because, being unable to relieve all the muscles of the trunk, by allowing them to pass into a state of relaxation, she seeks to relieve *one half* at the temporary expence of the *other*. The constitution becomes weakened, and the destructive process, being further aided by the abominable system of *tight stay lacing*, which prevents the exercise of the muscles of the back, attacks the bones of the spinal column, and *curvature of the spine* takes place, with all its attendant evils.

The reader will, by this time, have become convinced of the likelihood that truth is contained in the following remarks of Dr. Forbes, "We lately visited in a large boarding-school, containing forty girls; and we learnt, on close and accurate inquiry, that there was not *one of the girls who had been at the school two years*, (and the majority had been as long) that was *not more or less crooked*. Our patient was in this predicament; we could not but perceive (what all may perceive who meet that most melancholy of all processions, a boarding-school of young ladies in their walk,) that *all* her companions were pallid, sallow, and listless. We can assert on the same authority of personal observation, and on an extensive scale, that *scarcely a single girl (more especially of the middle classes) that has been at a boarding-school for two or three years, returns home with unimpaired health;* and for the truth of the assertion we may appeal to every candid *father* whose daughters have been placed in this situation."*

An American writer observes, That our ladies have generally good faces and bosoms. The trunk is short and thick. In walking they turn out the right foot, and the left follows it: that is, is twisted to the right. This gives to the ladies an awkward and constrained gait, very disagreeable to look at, and unlike the movements of an American lady.

---

* Cyclopedia of Practical Medicine. Article, Physical Education.

These observations justify the opinion already recorded, that curvature of the spine is general; for this method of walking is dependent, there can be but little doubt, upon this cause.

But it may be said, That young ladies of the higher classes do not go to school, and, consequently, these remarks do not so much apply to them. This may be true, but the same practices are, unfortunately, too much adhered to by those who have the management of the young, even in private families; and fashion, that tyrant, the worst and the most potent of all tyrants, has lent its aid to perpetuate the evils which exist in reference to these restrictions upon free muscular exercise.

Here again another evil arises. Exercise is taken: but what exercise is it? The carriage comes to the door, it may be an open one: and it may be lined with cushions so as to fit so comfortably into the curve in the back, that the weakened back feels the greatest comfort in the ride. The fresh air of the park does good: but then the limbs remain motionless: the muscles are not called into exercise, and the bodily system gains no strength. The dance, it is true, comes in the evening at the ball room, and much benefit might be derived from it: but this benefit is, in a great measure, destroyed by the late hours at which this exercise commences, and by the still later hours to which this exercise is kept up: and by the heat of the rooms, in which the exercise is carried on.

But there is another point of view in which the benefit of muscular exercise is strikingly apparent, that which is hardly ever realized by the females of the higher classes of society: and that is, the *action of the muscles of the abdomen upon the intestines* in aiding the functions of these important parts of the human machine. In *walking*, as was noticed in a preceding Number (No. V.), the abdominal muscles are brought into alternate contractions and relaxations: this alternate action stimulates the intestines, and thereby awakens them to a performance of their duties, which are both to separate the nutritious matter from the food as it passes along their canal, and also to impel forward that part of the food which is useless. The young lady, the delicate aristocrat, who prides herself on her delicacy, as contrasting her with the robust, the vulgar, health of the females of the lower class of society, cannot walk. She must be on the sofa: she must ride in the carriage. The abdominal muscles are, therefore, hardly ever called into activity. The bowels are impeded in their actions. Medicine is obliged to be used; and, at last, these important parts of the human machine become so inert that nothing but medicine will induce a performance of their duty. Persons in the middle and lower classes of society little think what receptacles of medicines these delicate children of the great are: and to how great an extent every quack medicine receives their patronage: whereas, did they take proper muscular exercise, medicines of a purgative kind would hardly ever be needed.

And here it may be proper to add, that many young ladies are treated by medical men for hip-joint disease, because one leg is longer than the other; when actually, the shortness of one limb and

the lengthened state of the other, are dependent upon the curvature of the spine.

While the evils arising from the want of muscular exercise are painfully evident among the females in the higher classes, the benefits connected with the use of muscular exertion are strikingly seen in the opposite sex, as connected with the sons of our nobles. There can be no doubt that the gentry of this country are men of fine stature and of great vigour; and the reason is, in part, to be ascribed to the exercise which they take. Horse exercise is their favourite occupation: and there cannot be, except *walking*, a better exercise. The sports of the field occupy them in the winter season, and travelling in the summer. Being freed from pecuniary necessities, and living upon the best food, they attain a fullness of growth and a power of frame which are pleasing to behold.

Do we find curved spines among them? Do we find curved spines among boys? No; and why? They romp, jump, laugh, race, leap.

Even the females in the higher classes, when taking the benefit of horse exercise, have the health much improved: and this exercise tends very much to relieve from many inconveniences, to which, from the dissipated mode of life so generally adopted by them, they would otherwise be subject.

Dr. Andrew Combe, in his invaluable work, entitled "The Principles of Physiology applied to the preservation of Health," makes the following remarks regarding RIDING: "It calls into more equal play all the muscles of the body, and, at the same time, engages the mind in the management of the animal, and exhilirates by the free contact of the air and more rapid change of scene. Even at a walking pace, a gentle, but universal and constant, action of the muscles is required to preserve the seat, and adapt the rider's position to the movements of the horse, and this kind of muscular action is extremely favourable to the proper and equal circulation of the blood, through the extreme vessels, and to the prevention of its accumulation in the central organs."

Having thus endeavoured to point out some of the evils arising from the want of muscular exercise in the higher classes; having pointed out the causes of these evils, in the next Number an attempt will be made to develop the evils which have resulted from the opposite condition, namely the *excess* of muscular exercise in regard to the lower classes of society.

CHURCH AND STATE, *by* LIBRA.

THE relations between church and state engross, at present, much attention; and, as both establishment-men and voluntaries, assume the ground of divine right for their respective systems, the following observations may not be unseasonable.

The prophet Ezekiel, in the last eight chapters of his prophecy, (which the reader is requested to examine), gives a view of the church and the state of Israel, which, to the present day, does not

seem to have been realized. The accomplishment is yet due. It is, as yet, a future event, which will be fulfilled when the Jews shall be "brought in" (to the Christian church) with "the fullness of the Gentiles."

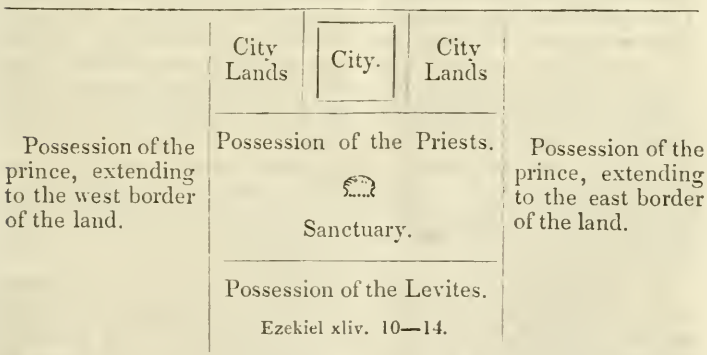
This view, taken by the prophet, of the church and the state, evidently implies the *union of the church with the state:* and, if such a constitution of things is appointed for the Jews under the Christian dispensation, surely no Christian nation can reject it upon the plea of its being Anti-Christian.

It is true that this is reasoning only by *inference.* But then, in regard to the *Christian sabbath*, the only authority for the same is from *inference:* there being no *positive command* for keeping the first day of the week as the sabbath. And, if from such passages as the following, the advocate of the *first* day of the week is justified in regarding it as the Christian's sabbath-day, namely, "This is the day the Lord hath made: we will be glad and rejoice in it." Psalm cxviii. 24: this being the day, when "the stone which the builders rejected became the head stone of the corner," by the resurrection of Christ; surely, if the deduction from these passages be correct, namely, *that the sabbath is to be observed on the day of Christ's resurrection*, it appears equally just to infer from the prophecy of Ezekiel that the Divine Being wills *a certain constitution of things under the Christian dispensation relating to church and state.*

The prophecy referred to describes a certain division of the land of Israel. This division will be best represented by a diagram.

On the *north* boundary of the land, the tribes of Dan, Asher, Napthali, Manasseh, Ephraim, Reuben, and Judah. On the *south* boundary, first the tribe of Benjamin, then Simeon, Issachar, Zebulon, and Gad.

Between Judah and Benjamin lie, as exhibited in the accompanying diagram, the possession of the prince, of the priests, of the Levites, the sanctuary, and the city.


City Lands
City.
City Lands
Possession of the prince, extending to the west border of the land.
Possession of the Priests.
Sanctuary.
Possession of the prince, extending to the east border of the land.
Possession of the Levites.
Ezekiel xliv. 10—14.

And now this land so divided, it is remarkable, is never called *Canaan* nor the city *Jerusalem*, these terms being figurative of *spiritual blessings under the Christian dispensation*; and as such

ought to be interpreted, not exclusively of the Jewish nation or of the land of Judea, but as developing principles of a new economy, which shall embrace the whole world; for Abraham was made heir of the whole world, and all nations are to be blessed in him.

On *this* ground, as one, it would appear that the prophecy referred to is not to be *literally* interpreted. There are other reasons, first, because such a division of the land in *parallel* sections from east to west, among the tribes, never actually *took* place; and, as the Jews have lost their genealogies, *can* never *take* place; and, second, when the Jews embrace Christianity they will leave off circumcision, the seal of their covenant title to the land of Canaan, and to all the peculiar and temporal privileges, which they enjoyed, as types of the spiritual and everlasting covenant; and when the seal is removed, their title is, of course, cancelled. To these may be added a *third* reason, which is, that the typical worship of the Old Testament is abolished, being fulfilled by the gospel; and when its restoration is treated of, reference is made to the spiritual worship of the New Testament, which is not confined to the mountains of Judea, but exists in the heart of every believer, wherever existing. Malachi i. 11; John iv. 21. A fourth reason may be added, viz. that as the description given of the temple, and of the out-buildings, makes it to occupy a far larger space than the mountain of the temple was capable of containing, (the city itself being forty miles in circuit, and the boundary, *eastward*, extending undefinedly) the mind is led to regard the idea to be conveyed to be the great increase of religion, and the propagation of the gospel, in the times predicted.

Such are the reasons why a literal interpretation is not to be given to the passages referred to, as containing the prophecy of Ezekiel.

What then are the conclusions to which we must arrive? These; That the land of Canaan, as well as all other countries, will be occupied by the descendants of Abraham, jointly with the Gentiles; That under that dispensation no distinctions regarding privileges, civil or religious, between Jews and Gentiles, shall exist; That as the *twelve* tribes comprehended the whole church of God, under the Old Testament, so the whole Christian church is comprehended under the same designation of the twelve tribes, Luke xxii. 29; That the equality of privileges, possessed by the various tribes, is signified by the land being equally apportioned among them; by the circumstance that each tribe had a gate into the city, and a right of access to the sanctuary; and hence may be derived the conclusion, that *each sect and denomination of the Christian church ought to be placed upon an equality.*

An uniformity in religion, or a preference of one denomination above all others, forms no principle of this dispensation. The land and its institutions are designed, in the goodness of God, to be for the benefit not of one favoured sect, but for his people among all sects, for not one of them can pretend to comprehend within its pale the "whole Israel of God."

To proceed: *Portions of the land being assigned for the prince,*

the city, the priests and the Levites, developes the principle of *public provision* being made for the *support of the civil Government, municipal, and ecclesiastical institutions.*

As the *civil* government is not to depend upon voluntary support, so ought not the *municipal* or *religious* institutions. Public funds ought to be set apart for their support.

Taking this view of the prophecy, the possessions of the priests and of the Levites represent a *national endowment* for the support of religion: but this, not the religion of *one sect*, but of *all* sects equally; not of *pure* religion exclusively, but even of the ministers of a corrupt and degenerate faith;* for the Levites were admitted, although they are described as "the Levites that ARE gone astray from me."

It is no prerogative of princes, or the civil government, or legislature, to decide infallibly between rival sects. They are not to "set their threshold by God's threshold:" that is, are not to prescribe the terms of admission into the visible church, for the Deity regards this as presumption. The prince may enter the temple at *his own gate;* but he is not to prescribe the same mode of entrance to his subjects, nor are they to him; but every man must conscientiously determine for himself.

The east gate, it is stated, is for the prince alone, because by it the Lord God himself entered into the house. The *east* signifies the *beginning.* The Lord entered by the gate of his own perfect obedience, and the prince, as his representative, enjoys this prerogative of a constitutional king. "He is perfect, and can do no wrong." He can do nothing contrary to law. His ministers alone are responsible. His person is sacred. And these peculiarities form the greatest security which a free people can have that their religion, lives, and property will be safe.

Again; while the *possessions* of the priests and Levites represent an endowment or *public* fund, the *tithes* and the *offerings*, referred to in the prophecy, represent the *voluntary*† fund, contributed for the support of religion. Thus, two sources of revenue are distinctly mentioned, which do not supersede, and are not inconsistent with, one another.

If this be a true explanation of the prophecy it condemns both parties; the *churchman*, who would *enjoy exclusively* the national support, and the *dissenter*, who would REJECT all public support.

---

* Our Correspondent honestly carries out his principle. In the next article he will find the same principle broached by an establishment-man, and close in company, the refutation of the principle.—EDITOR.

† Under the Mosaical economy, tithes were voluntary. God required tithes of his people, but gave no authority to the *magistrate* to enforce their payment. It was then, as *now*, a matter of conscience.—(Our friend, Libra, if he were a farmer in England, or a resident in some of our city parishes, would soon feel the opposite to be the fact. ED.)—The pharisee boasting that he paid tithes of all, evidences that to pay tithes was not a general practice in his time. Even the endowments now become church property were voluntary: and, being transferred from one sect to another by the omnipotence of Parliament, have become national property.

The principle of the former is selfish and unjust: the principle of the latter is contrary to the will of God, (a serious assertion. Ed.) to expediency, and even to the avowed principle of dissenters, viz. the lawfulness of receiving a particular endowment for the benefit of any one congregation.

What then do we propose?

That the whole ecclesiastical revenues should be converted into a moderate tax upon landlords, and this paid into a common fund; That out of this fund, the different sects should receive a portion according to their numerical strength, to be ascertained by a census; That each sect should be allowed to divide among its own members the proportion allotted.

Then, as no sect would be preferred to another, as no man would be taxed to support religion, and as every congregation would be allowed to raise a voluntary fund besides receiving the grant from the national fund, this prophecy would be fulfilled, and the interests of religion would be promoted.

In conclusion, we believe that the Jews will be converted to the Christian faith: will be incorporated among the nations with whom they sojourn; and, thus will be fulfilled the promise to Abraham, that he should be the heir to the world. The land of Judea will participate with other countries in this universal system of righteousness and peace; a system which forms a delightful model, worthy to be kept in view in the settlement of the question between church and state: for, by the transfer of the ecclesiastical revenues to the general fund, upon the death of the present incumbents, their vested right would be secured for life, and all dangerous and revolutionary principles avoided.

LIBRA.

Portobello, near Edinburgh,
January 9, 1836.

CHURCH RATES.—THE VOLUNTARY PRINCIPLE.

In May last, (1835,) the churchwardens of Bungay St. Mary, in Suffolk, caused Mr. John Childs, a dissenter, to be sued in the Ecclesiastical Court, Norwich, for 17s. 6d. church-rate, and sent him to Ipswich jail for refusing to appear in that court.

The payment of this rate they could have levied upon his goods, by a short and easy process, before a resident magistrate, but preferred an expensive and oppressive proceeding in an ecclesiastical court, in the hope, it is supposed, that the imprisonment and the other expences would deter dissenters from resisting similar impositions.

What the dominant church could not obtain by love might be yielded through fear.

In this they were defeated, for the measures then taken roused the spirit of the dissenters, and produced an union amongst them that will end in establishing the voluntary principle.

There is no more reason why one man should pay another man's teacher, than another man's doctor.

And the people, in all parts of the country, are now prepared to unite in the measures necessary for ridding themselves of these unjust and irreligious exactions.

At a vestry in the same parish on September 22nd, another church-rate was obtained—it was seconded by one parson, with another for chairman; and, in the course of the observations, this extraordinary declaration was made by Mr. Cobb, the sub-curate of the parish, the deputy of Mr. Archdeacon Glover, who is a pluralist and non-resident perpetual curate of Bungay St. Mary.

"The Reverend Mr. Cobb interrupted the speaker to remark that he had himself contributed to support the Catholic church in a foreign country, AND THOUGHT IT HIS DUTY TO SUPPORT WHATEVER CHURCH WAS ESTABLISHED."

This has led to the publication of two Letters,* addressed to this teacher of blind submission "to the powers that be." The following are extracts from the first:—"A meeting to make a church-rate is a meeting to make legal an exaction from all men to pay the expences of a few in worshipping God."

"Men who require this, must be lukewarm in religion, for such a meeting proceeds upon the assumption, that those who require it, are not willing to bear the expence of their own worship."

"They must be weak in the knowledge of religion and its duties, because they have not yet learned, that to compel men to erect altars, from which what they esteem to be false worship is to be offered by a strange priest, is not to consecrate, but to desecrate their offerings; is to commit impiety, not to offer reverence; is to enforce idolatry, the sin which is especially denounced in the Scriptures."

The writer then refers to the noble conduct of Daniel's friends, in refusing to bow down and worship the image which Nebuchadnezzar the king had set up; and thus concludes:—

"If you are correct, you should expound and expand the rule for the edification of your flock."

"If it be right to support 'whatever church is established by law,' you should teach your flock, that they are bound in Asia to worship idols; in Turkey, to acknowledge Mahomet; at Rome and Lisbon, to worship at that altar which you have so often pronounced to be idolatrous."

"If you will teach them this, then your teaching will be consistent with your proceedings at the meeting to compel dissenters to pay for supporting your shrine."

"If it be right to 'support whatever church is established by law,' it must be wrong to *oppose* whatever church is established by law. By what warrant could you justify the sending missionaries into foreign countries, to subvert the systems which are there established? Are you not, in so doing, seeking to pull down there

---

* Sold at one penny each for circulation, at Dinnis's, Paternoster Row.

what you are building up here? and if you may pull down there, how do you reconcile your conduct here?—You would destroy all motive to missionary exertions, and prevent the spread of the Gospel among those who are in heathen darkness. Art thou, 'a master in Israel,' and dost thou reason thus? Art thou a teacher of the people, and dost thou teach contradictions?"

"May we not reasonably, whilst these things are notorious, say unto the people,

'*Beware of the scribes.*'"

THE DEAN OF YORK. REFUSAL TO PAY CHURCH RATES.

Since the above remarks were put to press the following exemplification of the advocacy of the voluntary principle, by a Church of England dignitary, has been recorded in the daily papers. If this gentleman would carry out his principle, he would soon feel it necessary to deprecate all support for the establishment derived from dissenters. (But these men are wise, when pecuniary matters affect themselves: their eyes are shut, when the pecuniary matters affect the flock.)

"The Very Rev. the Dean of York has been summoned before the magistrates of Sudbury, in Devonshire, for refusing to pay church-rates. Dr. Cockburn defended the refusal, on the ground that he had no pew in the church, and therefore *he had no right to pay for what he did not enjoy.* This was the argument urged, as it will be recollected, by Mr. Childs, of Bungay, and for the maintenance of which that gentleman suffered imprisonment. We are glad, however, to see the subject thus taken up by a dignitary of the church, as such a recognizance of this evident principle of justice cannot fail to hasten the entire abolition of such a tax upon the liberty of conscience as church-rates must be allowed to be."—*York Courant, Sept.* 1835.

CONFIRMATION OF THE MAGNA CHARTA.

King Henry the Third succeeded his father John, and at his coronation took an oath, to restore to the people all their rights and liberties, and confirmed the charters granted by John: he afterwards violated these charters: the barons attacked him, made him submit, and Henry, in the 37th year of his reign, came to Westminster Hall, and in presence of the nobility and bishops with lighted torches in their hands, Magna Charta was read; the King all that while laying his hand on his breast; and at last solemnly swearing, *faithfully and inviolably to observe all the things therein contained, as he was a man, a christian, a soldier, and a king.* Then the bishops extinguished their torches on the ground, and every one said, *thus let him be extinguished, and stink in hell, who violates this charter.* Upon this the bells

were set a ringing, and all persons by rejoicing approved of what was done.—*Imprisonment for Debt Unconstitutional, by E. Farley, Esq.* 1798.

PHRENOLOGY, BY JOHN EPPS, M. D.

Essay VII.

Having considered the organs of the intellectual faculties, the organs of the *feelings* or *sentiments*, commonly called moral and religious, will be examined.

The discussion as to the propriety of the division of the organs will not be undertaken here. On this subject of *arrangement*, some remarks will be made at the conclusion of the history and of the functions of all the known organs: and, also, some additional remarks on the term *sentiments*: noticing merely, on the present occasion, that the term sentiment is applicable to the product of a faculty "that does not form specific ideas, but produces an emotion."

The first organ is that of Benevolence.*

This organ is situated above the organ of comparison, being the front organ on the central imaginary line on the top of the head, drawn upwards from the root of the nose, across the crown to the back of the head. On this line the first organ is individuality; above that, eventuality: then comparison, and then *benevolence*.

This organ, when large, gives a great elevation to the head in the front part. The hair marks, in general, the commencement of this organ.

Dr. Gall was led to the discovery of this organ by the following circumstance. A family in Vienna had a servant, who was remarkable for his goodness. Gall was told he should take a mould of his head. He did, and observed a considerable protuberance on the superior middle part of his forehead. This directed him to observe similar characters, and he found to his perfect satisfaction, that, in these, a similar organization exists. This organ is large in Jacob Jervis, in Henri Quatre; it is small in Bellingham, the Caribs; and generally moderate in murderers. It is large in Thurtell however.

In animals this organ exists, and communicates, when large, a mildness and a good-naturedness: and in those, so endowed, the place in their forehead, corresponding to the organ of benevolence in man, is elevated and prominent; while the ill-natured present a hollow at this place.

It is a curious coincidence, that, in the pictures of the Saviour of mankind, this organ is represented large: thus affording an evidence that the form of head must have been observed to exist in men, in whom the love of the human kind was manifested.

---

* Marked No. 13.

The man, who has this large, is kind-hearted, feels sympathy with distress. It makes the individual seek the happiness of others, and, is the grand constituent of that true politeness, which has been appropriately designated by Dr. Thomas Brown, "the moral grace of life."

It makes its possessor to attend to the little wants of others: to anticipate their wants. It places him in a different section from those Rosseau describes, "who know to do good only when they have a purse in their hand."

However, this faculty is, in its activity, quite blind. It does not dictate *what is kind*. It may lead its possessor to do much harm in attempting kind acts; which may be perpetuating the very evils which it is the object of the giver to relieve. "This faculty very much needs direction. It may lead a man to violate the moral law in neglecting to 'be just before he is generous.' Benevolence often prevents an individual from doing his duty, in cases where punishment ought to be inflicted. Hence many parents neglect to punish their children, simply on account of the pain *they themselves* experience in inflicting any punishment. The kind-hearted, 'social creatures' of society, as they are called, who are kind to the wretched, liberal to their friends, and destructive to their creditors, very frequently have benevolence large."*

The intellectual faculties require to be large, to guide benevolence. "Hence many men, feebly developed as to the intellectual faculties, support institutions, called *charitable*, but which, both in principle and practice, are injurious to the well-being of the community. They think that they are doing good and acting justly, but are mistaken; simply from their incompetency to take in all the facts and the circumstances, necessary to be remembered before a correct decision can be given upon what is good and what is just. Hence, how many of the charitable institutions of this country are BOUNTIES OFFERED TO LAZINESS, and PREMIUMS PRESENTED TO VICE."†

Benevolence says, "*Love mercy.*"

The organ, situated immediately behind that of benevolence, on each side of the central line already described, is known under the name of

The organ of VENERATION.‡

This organ was discovered by Dr. Gall.

He had a brother whom his father wished to bring up to the pursuit of merchandize. The brother wished to enter upon the duties of devotion. From his childhood his toys were church ornaments. Unable to set aside his strong tendency, he ran away from his occupation, turned hermit, till, at length, by Gall's influ-

* Horæ Phrenologicæ, page 32. Sold by E. Palmer, 18, Paternoster Row.
† Ibid, page 33.
‡ Marked No. 11.

ence with his father, he was allowed to undertake sacerdotal duties, and died in the strictest performance of these duties, and of the works of penance and mortification, which are superadded by the devotional sect to which he belonged.

Dr. Gall was led to the conclusion from a series of observations, to which, it is likely, this event gave origin, That the men, who undertake sacerdotal duties, are divisible into two classes: those who are *moved by* the *delight which they feel in devotional exercises*, and those who are influenced by the circumstance, that *the priest's office brings a morsel of bread* (in this country something more). He became, at last, convinced that the tendency to devotional feeling and exercises, as resulting from that feeling, is innate, and visited all kinds of places of worship, monasteries, &c. in order to observe the configuration of the heads of those who excel in devotion.

Most men, who prayed with fervour, Gall noticed, had the head bald. But as every bald man is not pious, and as women, who are generally not bald, are often extremely pious, the further observation was soon arrived at, namely, that the heads of these very pious men *were very elevated.* Lavater made the same observation. Following out this fact, evidences rapidly accumulated, establishing the situation of the organ under consideration.

The pictures of the saints present this organ as large. "It is also in this respect remarkable," observes Dr. Spurzheim, "that the head of Christ is always represented as very elevated. Have we the real picture of Christ? Have artists given to the head of Christ a configuration which they have observed in religious persons: or have they composed this figure from some internal inspiration? If the head be very high in the middle line, the hair falls down on both sides, just as this arrangement of the hair is presented in the pictures of Christ"—The Physiognomical System, by Dr. Spurzheim, p. 412, 413.

This organ has, as its function, the *tendency to devotional exercises:* which, when viewed, in reference to man, constitute *respect* and *honour;* when, in reference to the Supreme Being, *adoration.*

It is large in those nations that are inspired with a strong respect to their *nominal* superiors. In the Asiatic head this is largely developed. In the Hindoo head it is largely developed. In the sincere passive-obedience man it is generally large. And, hereupon, may be founded the explanation of the facts, that those nations which are most under the influence of *spiritual*, are equally under the influence of *civil*, despotism.

This feeling is a constituent in all acts of piety. Its simple activity seems to be devotional feeling. Its manifestations constitute *piety*; and when these manifestations are regulated by the active intellectual and moral powers, then *true religion* is seen.

This feeling is *blind.* It does not tell towards what man ought to exercise his devotional feeling. This organ is active when the Hindoo bows down before the stock of wood and stone, equally as much as when the Christian bows down before his God. In the

one case, however, the feeling is active without any direction: in the other, it is active with the intellect and the moral feelings.*

The existence of this organ, as a separate organ, will enable the believer in phrenology to explain how it is that some most devotional men are very wicked: that is, they have veneration large, and hence manifest most powerful devotional feeling; but not being equally developed in the moral feelings, they violate the law of love to their neighbours. Hence it is evident that a man's moral character is not be to estimated by the fervour of his devotional feelings.

The importance of the demonstration of the existence of a faculty of veneration, must be evident to the reflecting mind, since it establishes that a grand constituent, in the nature of man, is a sentiment of religion, and, therefore, mankind never will exist without religion. Dr. Gall himself argued that the existence of this faculty demonstrates the existence of a Deity: because as all other faculties have *objects* on which they outgo, so this must; and, such an object is the Divine Being.

This organ is large in Bruce, the Scottish king; in Martin, who burned York cathedral. It is large in Dr. Gordon, a clergyman of the Scotch establishment, whose fervour in devotional exercises is well known.

Servants, having this large, are particularly deferential in their manners.

It is a constituent in the feeling of respect which we feel towards our *parents*. The ancients seem to have been aware of the similarity between the two feelings: for Virgil designates the warrior Æneas as the "pius Æneas," because he carried away his *father* and the *household* gods from the flames, which consumed Troy. Filial piety is a phrase which is commonly used.

In conclusion, the highest function of this faculty seems to be expressed in the phrase,

"*To walk humbly with God.*"

And it responds to the command, "*fear* God;" and also to the command "*honour*, (but not fear,) the king."

The situation of this organ is beautiful and eminently instructive. It forms, as it were, the central part of the head. It is the key-stone in the moral arch. It is the part to which all the other organs converge: showing that the Deity should be the end, in which all the human faculties should centre; and, also, that veneration, when coming into activity, should exercise itself in conjunction with the other organs, with which it is surrounded, and should manifest itself, thus guided, through the direction of the intellectual faculties, placed as to their organs, before it.

---

* For further illustrations of the difference between *piety and religion*; of the real character of this faculty; of the various superstitions which have arisen from its activity; the reader is referred to the third of the phrenological essays, namely that on veneration, in the work entitled Horæ Phrenologicæ.

The organ of FIRMNESS*

is that which is situated immediately behind that of veneration. It is the next on the line drawn from the root of the nose upwards along the head in the centre to the back part.

Dr. Gall had observed, previous to the discovery of the site of this organ, that the quality of firmness has little relation or proportion to the intellect or the circumstances, in which the individual has been educated. A painter, named Unterburger, who was remarkable for an immovable perseverance in whatever he undertook, has the part of the head, considered to indicate the development of this organ, large. In the skull of a robber, who had been confined for a long time in prison to induce him to make known his accomplices, and, who, having been subjected to blows on this account, destroyed himself, this part was found large. After death, the two parietal bones, which unite over the situation of this organ, were found in him disunited.

Dr. Gall continued his observations, and was soon convinced of the existence of this organ.

This elevation of the head, at the back part, Lavater had observed in persons of an immovable character.

The function of this particular part of the brain seems to be that of producing determination, constancy, perseverance.

It may be determination in what is bad or in what is thought to be bad: then it is called stubbornness.

Perseverance in pursuits, not much liked by the individual persevering, seems to be greatly dependent upon this faculty.

It is large in Bruce, and the American Indians.

It is small in the bust of Mrs. H., in whose character the absence of firmness was strikingly manifested.

"Its want," observes Dr. Spurzheim, "renders men unsure, inconstant, and changeable, according to the other impressions." Its organ is situated in the midst of the organs of the other feelings, and forms, as it were, a buttress for their support.[1]

DISOBEDIENCE AND MISERY.—MAN VIOLATES GOD'S LAW IN MAKING DEAR WHAT GOD HAS MADE CHEAP.

The History of a Stone of Taxed Flour.

BY THE AUTHOR OF "CORN-LAW RHYMES."

CHRISTIANITY is the *religion of the poor*. We do not say so from the vulgar idea associated with that passage "to the poor the gospel is preached;" as if there was anything in the *mere circumstance of a person being poor* that gave him a *right* to the advantages of the gospel. It is not on this ground at all; but, because Christianity teaches attention to the poor: it makes its possessor to feel an interest in the sons of misery: it calls upon "those also who believe in its truths to lay up treasures in heaven," by doing

---

* Marked No. 18.

good upon the earth: it extends the neighbourly feeling to every child of the human race; and, having such a view of Christianity, and being desirous, at the same time, to point out how the present *laws* of this country are continually *counteracting* the exertions of Christians, and thereby to induce Christians to go to the root of the evils, namely, *these iniquitous laws*, begotten by feudal power on feudal selfishness, we have inserted the following:—

"In a certain city once dwelt a poor honest man, called Work Payall, who had been accustomed to give fifteen pence per stone for that sort of wheaten flour which is named "Bakers' Fine." There was no bread tax in those days; and it came to pass that Work Payall having earned half a crown, affirmed in his soul, and to his wife, and to his children, and to the uncle of his neighbourhood, that he would buy in the market a stone of "Bakers' Fine," and also a hat for his bareheaded son, Bob. So, on the evening of Saturday, Work Payall and his son went to market, where they were told by Mealface, the huckster, that Lord Starveall had made a law to tax bread, and that "Bakers' Fine" was no longer fifteen pence per stone, but two shillings and six pence; and Work Payall paid his half crown, even all that he had, for a stone of "Bakers' Fine;" but he grumbled in his gizzard, and thought, very absurdly, that Starveall had picked his pocket of fifteen pence; and then he cursed aloud, and called Starveall a "rogue in grain." So they returned home, and the howlings of bareheaded Bob alarmed the whole market; and, when they returned, the uncle of their neighbourhood laughed at them.

But the calamity did not end here; for if Plaits, the hatter, had sold to bareheaded Bob, for fifteen pence, the hat which he had in his shop, he would have gained three pence by it; but not having sold the hat, he was fain to expend three pence in food out of his substance; and was, therefore, of course, so much less able to find employment for his man, Botts, who made hats for him. And it came to pass, on the morning of Monday, that Botts came to Plaits, and said to him, "Let me make you another hat;" but Plaits answered him, and said, "Not having sold the hat, I do not want another." "But," said Botts, "we are clamming, what are we to do?" "Go to the devil!" said Plaits. But Botts went to the workhouse. And on the morning of Tuesday, Statepoke, the overseer, came to Work Payall, and demanded and obtained an additional poor-rate of one penny; whereupon Work Payall said, very absurdly, that Starveall's new law had already robbed him of sixteen pence; nevertheless, Statepoke reprehended him, and proved *that every farthing of the loss was two pence gain.** But Botts sickened in the workhouse, and remained there; and Mary, the wife of Botts, wandered in the streets, even when they were brilliant with gas, and she played the harlot with every man who gave her six pence; and the righteous were offended, and they called the beadle, and he flung her into his dungeon; and before morning the

* Such has been the impudence of the advocates of Corn Laws, that they have actually dared to represent them as beneficial, and as rendering a profit to the tradesman and the artizan.

frost had killed her. And William, the son of Botts, became a robber, and a murderer, and he fired his master's house, and the hangman slew him; and his tongue was bitten almost in twain by his teeth, and the end of it hung down over his lip by a shred of skin. And Statepoke gave unto Sarah, the sickly daughter of Botts, one shilling weekly, for food and raiment, and fire and lodging; his heart yearned to give her more, but he dared not because of the payers: so she drank gin for meat, and when she was dead, the *vermin which had fed on her departed.* But Botts, who sickened in the workhouse, loved his daughter; and when he heard that she had died, he smote his hand against his side, and fell down dead; and the idiots of the place, they who knew not good from evil, bore him to his grave; and they laughed, and the buriers laughed with them.

But this calamity did not end here; for it happened that Plaits, the hatter, owed nine pence to Resurrection Jack, and also, that Resurrection Jack owed nine pence to Work Payall; and further, it came to pass, that Work Payall owed eight pence for rabbit fur to one Shunks Suckegg. Now, if Plaits, the hatter, had sold to bare-headed Bob the hat which he had in his shop, he would have paid Resurrection Jack the nine pence which he owed him; but not having sold the hat, he could not pay Resurrection Jack; so Resurrection Jack could not pay Work Payall; and Work Payall could not pay Shunks Suckegg. And Shunks was wroth and swore an oath, and with his fist split the table; and he gnashed with his teeth, and his nose and chin smote each other; and he sued Work Payall in the Ten Penny Court, and cast him into prison. And when Work Payall had become very lean and pale in prison, being evil advised by the devil, he wrote a letter to Starveall, in which he stated, that he, Starveall, having, in a single stone of flour, robbed him, Work Payall, of fifteen pence, and one penny, and nine pence, and 10 per cent. on three pence, which Plaits would have laid out with him in rabbit fur, had he sold the hat; and expences of trial in Ten Penny Court, and horrible jail fees, and precious time fatally lost in prison, not to mention such trifles as an establishment subverted, a trade ruined, children made paupers, a wife self-hung in despair over the marriage bed; he thought his lordship could not refuse to lend the victim a shilling. To which infamous epistle, Work Payall, in due time, that is to say, in about six weeks, received the following most gracious answer:—

Big Beggar Hall, 23*rd July*, 1831.

Low scoundrel,—You be d——d. Though I robbed fifteen pence, I only sacked a groat. Eleven pence of the swag was lost in growing corn for you vagabonds on Robb'd Cotter's Rock. It is true, I succeeded in growing corn where *Martha once fed her ewe*, and where God never intended that corn should be grown; so much the greater my merit; but then I could not sell the crop for a fourth of what it cost me: for when I got it to market, I found that *half the rascally manufacturers had become bankrupt*, although I *had doubled the price of their bread*, and in every market prevented

them from selling their goods. Besides, only a day or two ago, when I sentenced an operative for conspiring to stop his master's circular saw, the fellow had the impudence to say in open court, that the question in dispute between him and his master merely was, *whether the master, out of his profits, or the workman out of his wages, should pay my bread-tax*, and keep me. So go to—the New Jerusalem.—I have the honour to be,

STARVEALL.

And it came to pass, after many weeks, that Statepoke, the overseer, becoming weary of feeding the children of Work Payall, paid the debt which was owing to Shunks Suckegg: so Work Payall arose out of prison. And the nails of his toes pierced through the leather of his shoes; and the children of his neighbours fled away from him, and their dogs barked at him, smelling him afar off. And his son, Bob, was lame with cold, and his daughter, whose name was her mother's, was foolish, and knew him not; and he wept, and trembled, and was silent; and the colour of the white of his eyes was changed; and his cheeks were of a pale blue, and his shrunken fingers were blue, and his tongue was an icicle, and his lips were black; and he became the death-spirit of cholera incarnate; and all who looked on him, and breathed his breath, died. Nevertheless, Starveall waxed madder than ever; for, while he kneeled on his knees, and prayed with his lips, he cursed the poor in his heart: and, in his carousals, he stamped on the earth, and swore that he had dethroned God; but it was only the shadow of his miserable self that he trampled under foot."

This picture is a dark one: It is too true, however, and depicts the misery that is produced, when men dare to violate the laws of the Creator. To show that these results are not over drawn, the article in the October Number on Corn Laws may be read with benefit. It is true bread is cheaper *now*, but for this we are not to ascribe thanks to the corn law makers, as will be shown in the next Number.

CORN LAWS.—*Misapplication of Scripture. Erroneous Translation. Mr. Bellamy's Bible.*

THE most audacious manifestation that, perhaps, man makes in regard to the Corn Laws, is the attempt to make God the author of the evils thence arising, by arguing, that, if it is an evil it is an evil that God has permitted; in the same manner as it is stated by the prophet Amos, iii. 6. "*Shall evil be in the city, and the Lord hath not done it?*" Now, the translation of this passage from the *original Hebrew*, as given by Mr. Bellamy, in his valuable work entitled "THE NEW TRANSLATION OF THE BIBLE FROM THE ORIGINAL HEBREW ONLY," is the following: "Shall evil be in the city, and Jehovah hath not requited it?" The difference between the two translations is very apparent; and yet, upon this translation would the advocates of the existing evils give the sanction of Providence to them.

THE HUMAN BODY. ESSAY VII.—*Voluntary and Involuntary Muscles. The Heart. The Respiratory Muscles. The number of Muscles. Contrivances to aid the Muscles in Motion. Muscles engaged in Speaking.*

IT was noticed in the Essay in the preceding Number that muscular fibre is endowed with a peculiar power, called *irritability.*

Although all muscular parts possess this particular power, it is possessed by different muscles in very different degrees.

Those muscles which possess this power in the greatest degree, are those which have functions to perform of the highest importance to life.

Those muscles that are thus essential to life, seem to have this power to so great a degree, as to become *independent of the will.* Hence, muscles are generally classed under two heads, those that are *under the dominion of the will*, called *voluntary*, and those that are *not under the dominion of the will*, called *involuntary.*

The *hollow* muscles of the body are those generally endowed with the greatest amount of this irritability; and, from this cause, their actions seem to be *involuntary.* Such a muscle is the *heart:* the intestinal canal also: the stomach: the urinary bladder.

The advantages resulting from this endowment must be evident to all. Life is dependent upon the *continual*, the *never-ceasing*, action of the heart. If the heart ceases to beat, life ceases also. If, then, the heart was not endowed with this great degree of irritability, it might become weary. If its action depended on the will, man might, under the influence of desponding feelings, or of disappointed ambition, stop the action of the heart, and thus bring himself very readily to a suicidal end.

The same remarks are applicable to the action of the muscles engaged in the process of *respiration.* As respiration goes on when we are asleep as when we are awake, the Creator has constituted the muscles, engaged in this process, independent of the will.

Though these muscles, called involuntary, are not regulated in their actions by the will, still, under certain circumstances, they can be influenced by the will. Thus, with respect to the motion of the heart, Drs. Baynard and Cheyne saw the case of an English officer, who could stop the motion of his heart and arteries at pleasure. (Dr. Cheyne's Treatise on Nervous Diseases.) Some thieves have gained so great a power over the respiratory muscles, as to have committed suicide by holding their breath.

Some muscles are partially voluntary and partially involuntary. Thus, a sphincter muscle, at the termination of the intestinal canal, shuts up the gut, and keeps it closed: but this muscle is overcome by the determination of the will, and the passage is made free.

In fact, wherever we look we must see the wisdom of the great Mechanician, who contrived the machine, called the *human body*, in so wonderful a way.

The number of muscles in the human body is 450, or thereabouts.

Each muscle, moreover, has its own individual mechanism, adapted to the particular motions for which it is intended.

To facilitate the varied motions which the muscles are destined to perform, the Creator has supplied several contrivances. The first to be noticed are little *bags*, containing an oily like fluid, called mucous bags, (bursæ mucosæ), generally found among the muscles of the extremities, which are so perpetually called into action.

The second are little bones, called *sesamoid*, which seem to serve the part of pulleys in giving places over which the tendons of the muscles can act.

Another contrivance by which the motion of the muscles is aided, is that of being imbedded in fat: which, by its softness, allows a great freedom of motion.

There are many other contrivances by which the motion of muscles is facilitated.

Different OCCUPATIONS occupy different muscles and different numbers of muscles.

A person playing on the harp, dancing, and singing at the same time, exercises about 300 muscles at once. G. Ent. Animadversiones in Thurstoni diatribam, p. 130.

The act of speaking calls into play numerous muscles. Thus, the *larynx*, already referred to as being the commencement of the *windpipe*, situated in the throat *before* the œsophagus (see p. 44), is composed of *five* cartilages; and these five cartilages have, for the motions, to which in speaking they are liable, *seven* pairs of muscles. "Now fourteen muscles, that can act separately or in pairs, in combination with the whole, or with any two or more of the rest, are capable of producing 16,383 different movements."

The possibility of these effects resulting from so few muscles may be evidenced by the following diagram.

Suppose A and B are two muscles, forming a pair. A and B each performs a separate movement, and A B, acting together, produce a third. If a third muscle, as C, is added, the number of movements will be seven: and a fourth muscle, would, as will be seen from the accompanying diagram, raise the number to fifteen. Thus, every additional muscle, besides giving a separate movement, doubles the number of all the preceding, whenever the part to which they are attached is capable of moving in every direction.

1	A
2	B
3	B a
4	C
5	C a
6	C b
7	C a b
8	D
9	D a
10	D b
11	D a b
12	D c
13	D c a
14	D c b
15	D c a b

Besides these muscles of the larynx, we use, in speaking, a great many more. There are *fifteen* more pairs of muscles, attached to

these cartilages and to the bone, situated at the top of cartilages (see p. 44) called the os hyoides; these, acting as agents, antagonists, directors, are constantly employed in preserving the cartilages of the larynx steady, in regulating the place of their situation, or moving them as occasion requires, upwards and downwards, backwards and forwards, and in every way. These muscles, independent of the former, are susceptible of 1,073.741,823 different combinations: and co-operating with the seven pairs of the larynx, of 17,592,186,044,415, exclusive of the changes which must arise from the different degrees of force and velocity, and the infinitely varied order of succession in which they may be brought in action.*

And these are not all the muscles engaged in the process of speaking. Sufficient has been stated to show what a wonderful variety of combinations are produced in the process of speaking; of which any one can obtain some notion by being reminded of the fact, that the celebrated Haller articulated 1500 letters in a minute, which, necessarily, required 1500 contractions, and as many relaxations, of the lingual muscles.

Other occupations might be noticed, but as illustrations may hereafter occur, a few concluding remarks may now be made on the power possessed a living muscle.

Muscular power depends very much upon the life and the nerves. "Separated from the body, and deprived of both, the muscle which formerly contracted with a power equal to 100 pounds, will be torn asunder by a weight of *ten*."

Muscular power is displayed most strikingly in *fish*: whose white flesh is muscular; negativing the common notion, that *redness* is an indication of the muscular fibre. "I have seen," writes Sir Gilbert Blane, "the sword of a sword-fish sticking in a plank which it had penetrated from side to side! and when it is considered that the animal was then moving through a medium even a thousand times more dense than that through which a bird cleaves its course at different heights of the atmosphere, and that this was performed in the same direction with the ship, what a conception must we form of this display of muscular power." Haller observes, in his Elements of Physiology, that muscular strength is proportionably much greater in smaller animals. A flea can draw from seventy to eighty times its own weight, whereas a horse cannot draw with ease more than three times its own weight.

To show the great skill and the wonderful arrangement, manifested by the Creator in contriving the muscular system so as to perform the duties essential to human enjoyment; and to demonstrate what numerous agents are engaged in performing actions which hardly ever occupy human attention, being so constantly performed, so necessary to existence, so essential to the duties of life, this Essay will be concluded by the following interesting remarks by Sir Charles Bell upon the duties which the nerves perform.

---

* Dr. John Barclay's Work on a New Anatomical Nomenclature, p. 71, 72.

" The muscles have two nerves," says Sir Charles, " which fact has not hitherto been noticed, because they are commonly bound up together. But whenever the nerves, as about the head, go in a separate course, we find that there is a sensitive nerve and a motor nerve distributed to the muscular fibre, and we have reason to conclude that those branches of the spinal nerves which go to the muscles, consist of a motor and a sensitive filament.

" It has been supposed hitherto, that the office of a muscular nerve is only to carry out the mandate of the will, and to excite the muscle to action, but this betrays a very inaccurate knowledge of the action of the muscular system; for, before the muscular system can be controlled under the influence of the will, there must be a consciousness or knowledge of the condition of the muscle.

" When we admit that the various conditions of the muscle must be estimated or perceived, in order to be under the due control of the will, the natural question arises, Is that nerve which carries out the mandate of the will capable of conveying, at the same moment, an impression retrograde to the course of that influence which is going from the brain to the muscle? If we had no facts in anatomy to proceed upon, still reason would declare to us that the same filament of a nerve could not convey a motion, of whatever nature that motion may be, whether vibration or motion of spirits, in opposite directions at the same moment of time.

" I find that, to the full operation of the muscular power, two distinct filaments of nerves are necessary, and that a circle is established between the sensorium and the muscle; that one filament or single nerve carries the influence of the will towards the muscle, which nerve has no power to convey an impression backwards to the brain; and that another nerve connects the muscle with the brain, and, acting as a sentient nerve, conveys the impression of the condition of the muscle to the mind, but has no operation in a direction outwards from the brain towards the muscle, and does not therefore excite the muscle, however irritated*."

Having noticed these particulars, testimony is to be given to the truths, that these muscles were given for exercise, and that this exercise was intended for the production of a state of gratification; this gratification ensuring the activity necessary for health. Look at the infant, how unwilling to be bound with its rolling bands. The Creator has implanted the *desire of action;* He has given muscles to give force to that desire.

Facetiæ Antiquæ.—A lawyer had taken away a cow from a poor man, who complained thereof to the king. " I will *hear what he will say* to the matter," quoth the king. " Nay, my Lord," said the poor man, " if you *hear him speak*, then have I surely lost my cow indeed."—*Schoolmaster, or Teacher of Fable Philosophie*, 1576.

---

* Bell's Anatomy, seventh edition, vol. ii. p. 372.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

APRIL 1, 1836.

REPEAL OF THE TAXES UPON KNOWLEDGE.—A LETTER OF THE POET, JOHN MILTON.

In the time of John Milton, the parliament, which had done so much for the liberties of the country, was led to the conclusion, from observing the evils sometimes arising from liberty wandering into licentiousness, that *liberty must have restraints put upon it.* To this conclusion in the abstract there can be but little opposition: for who can question the fact, that the very existence of society, as preserved by an executive government, is dependent upon the individuals submitting themselves to the restraint of the governments entrusted with the power.

An objection, however, occurs when this conclusion is put into *force* in the enactment of laws, which not merely *regulate*, but *oppress* liberty. This happened with the parliament. They, in endeavouring to restrain the licentiousness of the press, passed a law, "*to regulate printing: that no book, pamphlet or paper, shall be henceforth printed, unless the same be first approved and licensed by such, or at least one of such, as shall be hereto appointed.*"

Against this law, John Milton felt strongly, and addressed a letter to the parliament, which he designated as "A Speech for the Liberty of Unlicensed Printing."

This letter, at least the substance of it, is now presented to the reader. The reasons why the present moment is chosen are, that the people of this country have been for many years, and still are, placed under a system, almost as oppressive to liberty, as was the law passed by the parliament in Milton's time; and also, it is likely, that, during this session of the British parliament, the Chancellor of the Exchequer will attempt to conceal the nature of the *oppression* under which our liberty labours, by *lightening* instead of *removing* the oppressive power.

The law, under which we now labour, is, that *no paper, containing* POLITICAL *information can be published at* DAILY, WEEKLY, *or any periods under a month, without having a four-penny stamp attached to it.*

Now this is almost as bad as allowing no paper to be published *without a license*, because it is evident, that the heavy price, put upon a paper by this additional four-pence, must tend to prevent

both any persons publishing their thoughts upon any political subjects, and persons reading what is published on such subjects, unless the persons supplying and the persons supplied are both *rich*. This law acts, therefore, as a *licensing* law. It *licenses the rich* to be instructed and not the poor. It guarantees instruction to those who can get instruction readily from other sources: and it denies instruction to those whose want of means precludes them from these other sources.

This law has now become odious to the British people: and they are determined to be delivered from it. They assert, (and follow up their assertion by purchasing nearly 100,000 *unstamped* papers a week,) that this oppression shall no longer continue. The voice, and the determination with which it is uttered, have arrested the attention of the government; and a necessity is felt that the burden should be removed. But Chancellors of the Exchequer cannot bear to let go any means by which they have hold of the public money; and, therefore, always try to contrive means either to continue the tax under another name, or to diminish the weight of the burden without removing it. In this case reducing the *four-pence* to *one penny*.*

Thus, it is said, does the Chancellor of the Exchequer of this country feel at the present moment. He intends to *diminish*, but not *to remove* the tax. This will not do: because, though the range of political information will then be extended, still the tax will prevent that liberty of unlicensed printing which Milton advocated, and which, believing this to be connected with the happiness of man, we advocate.

Besides, if the penny stamp duty be required, it is quite evident that all the *machinery for the collection* of this penny; all the machinery *for enforcing the payment* of the fines for not paying this penny, must be kept up. And we are further led to believe that the government propose to add *other* machinery, of a kind and a character which the nation will not brook, and which will recoil on the government if they dare attempt to give the force of law to these their intentions. But we wait.

The object in the publication of the speech of John Milton, is to give an increased tone to the voice of the public on this important matter: and to induce them to raise that voice, which, if raised, will be as effectual in getting rid of the tax *altogether*, as in *diminishing* the amount; for it is a truth, which cannot be too deeply impressed upon the minds of the oppressed, that, whenever an oppressor is so terrified as to express a willingness to *diminish* an oppression, the same voice, the same manifestation, which terrified him to consent to this diminution, will make him give up *entirely* the oppression.

We say, therefore, read this letter of John Milton, and then you will proclaim your determination to have the liberty of unlicensed printing, ever remembering to proclaim it in a *legitimate* way,

---

* This was written before the late exposé of the Chancellor of the Exchequer.

namely, *through your representatives in parliament* and by *petitions*, strong, but respectfully worded, to the legislature.

"I deny not," says John Milton, and his words live and breathe, "but that it is of greatest concernment in the church and commonwealth, to have a vigilant eye how books demean themselves as well as men; and thereafter to confine, imprison, and do sharpest justice on them as malefactors; for books are not absolutely dead things, but do contain a progeny of life in them to be as active as that soul was whose progeny they are; nay, they do preserve as in a vial the purest efficacy and extraction of that living intellect that bred them. I know they are as lively, and as vigorously productive, as those fabulous dragon's teeth; and being sown up and down, may chance to spring up armed men. And yet on the other hand, unless wariness be used, as good almost kill a man as kill a good book: who kills a man kills a reasonable creature, God's image; but he who destroys a good book, kills reason itself, kills the image of God, as it were in the eye. Many a man lives a burden to the earth; but a good book is the precious lifeblood of a master spirit, embalmed and treasured up on purpose to a life beyond life. It is true, no age can restore a life, whereof perhaps there is no great loss; and revolutions of ages do not oft recover the loss of a rejected truth, for the want of which whole nations fare the worse. We should be wary therefore what persecution we raise against the living labours of public men, how we spill that seasoned life of man, preserved and stored up in books; since we see a kind of homicide may be thus committed, sometimes a martyrdom; and if it extends to the whole impression, a kind of massacre, whereof the execution ends not in the slaying of an elemental life, but strikes at the æthereal and fifth essence, the breath of reason itself; slays an immortality rather than a life."

Milton then gives a historical account of licensing among the Greeks, the Romans, the Roman emperors, the first councils, the popes; of which a part being truly instructive as illustrating how the evil of licensing grew up, is here recorded.

"In Athens, where books and wits were ever busier than in any other part of Greece, I find but only two sorts of writings which the magistrate cared to take notice of; those either blasphemous and atheistical, or libellous. Thus the book of Protagoras were by the judges of Areopagus commanded to be burnt, and himself banished the territory for a discourse, begun with his confessing not to know, 'whether there were gods, or whether not.' And against defaming, it was agreed that none should be traduced by name, as was the manner of Vetus Comœdia, whereby we may guess how they censured libelling. Of other sects and opinions, though tending to voluptuousness, and the denying of divine Providence, they took no heed. Therefore we do not read that either Epicurus, or that libertine school of Cyrene, or what the Cynic impudence uttered, was ever questioned by the laws. That other leading city of Greece, Lacedæmon, considering that Lycurgus their lawgiver was so addicted to elegant learning, as to have been the first that brought out of Ionia the scattered works of Homer, and sent the poet Thales

from Crete, to prepare and mollify the Spartan surliness with his smooth songs and odes, the better to plant among them law and civility; it is to be wondered how museless and unbookish they were, minding nought but the feats of war. There needed no licensing of books among them, for they disliked all but their own laconic apophthegms, and took a slight occasion to chase Archilocus out of their city, perhaps for composing in a higher strain than their own soldiery, ballads, and roundels, could reach to; or if it were for his broad verses, they were not therein so cautious, but they were as dissolute in their promiscuous conversing; whence Euripides affirms in Andromache, that their women were all unchaste. This much may give us light after what sort of books were prohibited among the Greeks. The Romans also, for many ages, trained up only to a military roughness, resembling most the Lacedæmonian guise, knew of learning little but what their twelve tables and the pontific college with their augurs and flamins taught them in religion and law; so unacquainted with other learning, that when Carneades and Critolaus, with the stoic Diogenes, coming embassadors to Rome, took thereby occasion to give the city a taste of their philosophy, they were suspected for seducers by no less a man than Cato the censor, who moved it in the senate to dismiss them speedily, and to banish all such Attic babblers out of Italy. But Scipio and others of the noblest senators withstood him and his old Sabin austerity; honoured and admired the men: and the censor himself at last, in his old age, fell to the study of that whereof before he was so scrupulous. And yet at the same time, Nævius and Plautus, the first Latin comedians, had filled the city with all the borrowed scenes of Menander and Philemon. Then began to be considered there also what was to be done to libellous books and authors; for Nævius was quickly cast into prison for his unbridled pen, and released by the tribunes upon his recantation; we read also that libels were burnt, and the makers punished, by Augustus. The like severity, no doubt, was used, if aught were impiously written against their esteemed gods. Except in these two points, how the world went in books, the magistrate kept no reckoning."

Referring to the Roman Emperors, he remarks, "The books of those whom they took to be grand heretics were examined, refuted, and condemned in the general councils; and not till then were prohibited, or burnt, by authority of the emperor. As for the writings of heathen authors, unless they were plain invectives against Christianity, as those of Porphyrius and Proclus, they met with no interdict that can be cited, till about the year 400, in a Carthaginian council, wherein bishops themselves were forbid to read the books of gentiles, but heresies they might read; while others long before them, on the contrary, scrupled more the books of heretics than of gentiles. And that the primitive councils and bishops were wont only to declare what books were not commendable, passing no further, but leaving it to each one's conscience to read or to lay by, till after the year 800, is observed already by Padre Paolo the great unmasker of the Trentine council. After which time the popes of Rome, engrossing what they pleased of political rule into their own

hands, extended their dominion over men's eyes, as they had before over their judgments, burning and prohibiting to be read what they fancied not; yet sparing in their censures, and the books not many which they so dealt with; till Martin the fifth, by his bull, not only prohibited, but was the first that excommunicated the reading of heretical books: for about that time Wickliffe and Husse growing terrible, were they who first drove the papal court to a stricter policy of prohibiting. Which course Leo the tenth and his successors followed, until the council of Trent and the Spanish inquisition engendering together brought forth or perfected those catalogues and expurging indexes, that rake through the entrails of many an old good author, with a violation worse than any could be offered to his tomb. Nor did they stay in matters heretical, but any subject that was not to their palate, they either condemned in a prohibition, or had it straight into the new Purgatory of an index. To fill up the measure of encroachment, their last invention was to ordain that no book, pamphlet, or paper, should be printed (as if St. Peter had bequeathed them the keys of the press also as well as of Paradise) unless it were approved and licensed under the hands of two or three gluttonous friars. For example:

> Let the chancellor Cini be pleased to see if in this present work be contained aught that may withstand the printing;
>
> Vincent Rabbata, vicar of Florence.
>
> I have seen this present work, and find nothing athwart the catholic faith and good manners; in witness whereof I have given, &c.
>
> Nicolo Cini, chancellor of Florence.
>
> Attending the preceding relation, it is allowed that this present work of Davanzati may be printed,
>
> Vincent Rabatta, &c.
>
> It may be printed, July 15.
>
> Friar Simon Mompei d'Amelia, chancellor of the holy office in Florence.

Sometimes five imprimaturs are seen together dialogue wise in the piatza of one titlepage, complimenting and ducking each to other with their shaven reverences, whether the author, who stands by in perplexity at the foot of his epistle, shall to the press or to the spunge. These are the pretty responsories, these are the dear antiphonies, that so bewitched of late our prelates and their chaplains, with the goodly echo they made; and besotted us to the gay imitation of a lordly imprimatur, one from Lambeth-house, another from the west end of St. Paul's; so apishly romanizing, that the word of command still was set down in Latin; as if the learned grammatical pen that wrote it would cast no ink without Latin; or perhaps, as they thought, because no vulgar tongue was worthy to express the pure conceit of an imprimatur; but rather, as I hope, for that our English, the language of men ever famous and foremost in the achievements of liberty, will not easily find servile letters enow

to spell such a dictatory presumption Englished. And thus ye have the inventors and the original of book licensing ripped up and drawn as lineally as any pedigree. We have it not, that can be heard of, from any ancient state, or polity, or church, nor by any statute left us by our ancestors elder or later; nor from the modern custom of any reformed city or church abroad; but from the most antichristian council, and the most tyrannous inquisition, that ever inquired. Till then books were ever as freely admitted into the world as any other birth; the issue of the brain was no more stifled than the issue of the womb; no envious Juno* sat crosslegged over the nativity of any man's intellectual offspring; but if it proved a monster, who denies but that it was justly burnt, or sunk into the sea? But that a book, in worse condition than a peccant soul, should be to stand before a jury ere it be born to the world, and undergo yet in darkness the judgment of Radamanth and his colleagues, ere it can pass the ferry backward into light, was never heard before, till that mysterious iniquity, provoked and troubled at the first entrance of reformation, sought out new limboes and new hells wherein they might include our books also within the number of their damned."

John Milton then notices the arguments urged in favour of the restraints upon printing: noticing some facts, which demonstrate that some of the most respected men and elevated Christians did not limit their reading in the way that these licensers wish to do that of others, and shows that the reading of good books, and books not considered to be good, is essential in man's present state to the development of virtue.

"Not to insist upon the examples of Moses, Daniel, and Paul, who were skilful in all the learning of the Egyptians, Chaldeans, and Greeks, which could not probably be without reading their books of all sorts, in Paul especially, who thought it no defilement to insert into holy Scripture the sentences of three Greek poets, and one of them a tragedian. Julian the Apostate, and subtlest enemy to our faith, made a decree forbidding Christians the study of heathen learning; for said he, they wound us with our own weapons, and with our own arts and sciences they overcome us. And indeed the Christians were put so to their shifts by this crafty means, and so much in danger to decline into all ignorance, that the two Apollinarii were fain, as a man may say, to coin all the seven liberal sciences out of the Bible, reducing it into divers forms of orations, poems, dialogues, even to the calculating of a new christian grammar. But, saith the historian Socrates, the providence of God provided better than the industry of Apollinarius and his son, by taking away that illiterate law with the life of him who devised it. So great an injury they then held it to be deprived of Hellenic learning; and thought it a persecution more undermining, and secretly decaying the church, than the open cruelty of Decius or Dioclesian. And perhaps it was the some politic drift that the

---

* Juno was the goddess who was supposed to preside over the birth of children.

devil whipped St. Jerom in a lenten dream, for reading Cicero; or else it was a phantasm, bred by the fever which had then seized him. For had an angel been his discipliner, unless it were for dwelling too much on Ciceronianisms, and had chastised the reading, not the vanity, it had been plainly partial; first to correct him for grave Cicero, and not for scurril Plautus, whom he confesses to have been reading not long before; next to correct him only, and let so many more ancient fathers wax old in those pleasant and florid studies without the lash of such a tutoring apparition. But if it be agreed we shall be tried by visions, there is a vision recorded by Eusebius, far ancienter than this tale of Jerom, to the nun Eustochium, and besides, has nothing of a fever in it. Dionysius Alexandrinus was, about the year 240, a person of great name in the church, for piety and learning, who had wont to avail himself much against heretics, by being conversant in their books; until a certain presbyter laid it scrupulously to his conscience, how he durst venture himself amongst those defiling volumes. The worthy man, loth to give offence, fell into a new debate with himself, what was to be thought; when suddenly a vision sent from God (it is his own epistle that so avers it) confirmed him in these words: 'Read any books whatever come to thy hands, for thou art sufficient both to judge aright, and to examine each matter.' To this revelation he assented the sooner, as he confesses, because it was answerable to that of the apostle to the Thessalonians, 'Prove all things, hold fast that which is good.' And he might have added another remarkable saying of the same author: 'To the pure all things are pure;' not only meats and drinks, but all kind of knowledge, whether of good or evil; the knowledge cannot defile, nor, consequently, the books, if the will and conscience be not defiled. For books are as meats and viands are; some of good, some of evil substance; and yet God in that unapocryphal vision said without exception, 'Rise, Peter, kill and eat;' leaving the choice to each man's discretion. Wholesome meats to a vitiated stomach differ little or nothing from unwholesome; and best books to a naughty mind are not unapplicable to occasions of evil. Bad meats will scarce breed good nourishment in the healthiest concoction; but herein the difference is of bad books, that they to a discreet and judicious reader serve, in many respects to discover, to confute, to forewarn, and to illustrate."

Milton then brings forward a striking argument, that as God has given a large dietary for the *body*, and has left man to his choice, surely man should be allowed to have his own choice in regard to the dietary of his *mind*.

"I conceive, therefore, that when God did enlarge the universal diet of man's body, (saving ever the rules of temperance,) he then also, as before, left arbitrary the dieting and repasting of our minds; as wherein every mature man might have to exercise his own leading capacity. How great a virtue is temperance, how much of moment through the whole life of man! Yet God commits the managing so great a trust without particular law or prescription, wholly to the demeanour of every grown man. And therefore

when he himself tabled the Jews from heaven, that omer, which was every man's daily portion of manna, is computed to have been more than might have well sufficed the heartiest feeder thrice as many meals. For those actions which enter into a man, rather than issue out of him, and therefore defile not, God uses not to captivate under a perpetual childhood of prescription, but trusts him with the gift of reason to be his own chooser; there were but little work left for preaching, if law and compulsion should grow so fast upon those things which heretofore were governed only by exhortation. Solomon informs us, that much reading is a weariness to the flesh; but neither he, nor other inspired author, tells us that such or such reading is unlawful; yet certainly had God thought good to limit us herein, it had been much more expedient to have told us what was unlawful, than what was wearisome. As for the burning of those Ephesian books by St. Paul's converts; it is replied, the books were magic, the Syriac so renders them. It was a private act, a voluntary act, and leaves us to a voluntary imitation: the men, in remorse, burnt those books which were their own; the magistrate by this example is not appointed; these men practised the books, another might, perhaps, have read them in some sort usefully. Good and evil we know in the field of this world grow up together almost inseparably; and the knowledge of good is so involved and interwoven with the knowledge of evil, and in so many cunning resemblances hardly to be discerned, that those confused seeds which were imposed upon Psyche as an incessant labour to cull out, and sort asunder, were not more intermixed. It was from out the rind of one apple tasted, that the knowledge of good and evil, as two twins cleaving together, leaped forth into the world. And, perhaps, this is that doom which Adam fell into of knowing good and evil, that is to say, of knowing good by evil. As therefore the state of man now is; what wisdom can there be to choose, what continence to forbear, without the knowledge of evil? He that can apprehend and consider vice with all her baits and seeming pleasures, and yet abstain, and yet distinguish, and yet prefer that which is truly better, he is the true warfaring Christian. I cannot praise a fugitive and cloistered virtue unexercised, and unbreathed, that never sallies out and sees her adversary, but slinks out of the race, where that immortal garland is to be run for, not without dust and heat. Assuredly we bring not innocence into the world, we bring impurity much rather; that which purifies us is trial, and trial is by what is contrary. That virtue, therefore, which is but a youngling in the contemplation of evil, and knows not the utmost that vice promises to her followers, and rejects it, is but a *blank* virtue, not a *pure;* her whiteness is but an excremental whiteness; which was the reason why our sage and serious poet Spenser, describing true temperance under the person of Guion, brings him in with his palmer through the cave of Mammon, and the bower of earthly bliss, that he might see and know, and yet abstain. Since, therefore, the knowledge and the survey of vice are in this world so necessary to the constituting of human virtue, and the scanning of errour to the confirmation of truth, how can we more safely, and

with less danger, scout into the regions of sin and falsity, than by reading all manner of tractates, and hearing all manner of reason? And this is the benefit which may be had of books promiscuously read"

John Milton then refers to the evils said to arise from allowing *all* books to be published, and as these evils are, at the present day, brought forward as arguments against the *total* repeal of the taxes on knowledge, (another mode of licensing,) it will be useful to record the argument of the poet.

"But of the harm that may result hence, three kinds are usually reckoned. First, is feared the infection that may spread; but then, all human learning and controversy in religious points must remove out of the world, yea, the Bible itself; for that ofttimes relates blasphemy not nicely, it describes the carnal sense of wicked men not unelegantly, it brings in holiest men passionately murmuring against providence through all the arguments of Epicurus; in other great disputes it answers dubiously and darkly to the common reader."

The next objection is, that "we must not expose ourselves to temptations without necessity, and next to that, not employ our time in vain things. To both these objections one answer will serve, out of the grounds already laid, that to all men such books are not temptations, nor vanities; but useful drugs and materials wherewith to temper and compose affective and strong medicines, which man's life cannot want. The rest, as children and childish men, who have not the heart to qualify and prepare these working minerals, well may be exhorted to forbear, but hindered forcibly they cannot be, by all the licensing that sainted inquisition could ever yet contrive; which is what I promised to deliver next: that this order of licensing conduces nothing to the end for which it was framed; and hath almost prevented me by being clear already while thus much hath been explaining. See the ingenuity of truth, who, when she gets a free and willing hand, opens herself faster than the pace of method and discourse can overtake her. It was the task which I began with, to show that no nation, or well instituted state, if they valued books at all, did ever use this way of licensing; and it might be answered, that this is a piece of prudence lately discovered. If we think to regulate printing, thereby to rectify manners, we must regulate all recreations and pastimes, all that is delightful to man. No music must be heard, no songs be set or sung, but what is grave and doric. There must be licensing dancers, that no gesture, motion, or deportment be taught our youth, but what by their allowance shall be thought honest. It will ask more than the work of twenty licensers to examine all the lutes, the violins, and the guitars in every house; they must not be suffered to prattle as they do, but must be licensed what they may say. And who shall silence all the airs and madrigals that whisper softness in chambers? The windows also, and the balconies must be thought on; there are shrewd books, with dangerous frontispieces, set to sale; who shall prohibit them, shall twenty licensers? The villages also must have their visitors to inquire what lectures the

bagpipe and the rebec reads, even to the ballatry and the gamut of every municipal fiddler; for these are the countryman's Arcadias, and his Monte Mayors. Next, what more national corruption, for which England hears ill abroad, than household gluttony; who shall be the rectors of our daily rioting? And what shall be done to inhibit the multitude, that frequent those houses where drunkenness is sold and harboured? Our garments also should be referred to the licensing of some more sober workmasters, to see them cut into a less wanton garb. Who shall regulate all the mixed conversation of our youth, male and female together, as is the fashion of this country? Who shall still appoint what shall be discoursed, what presumed, and no further? Lastly, who shall forbid and separate all idle resort, all evil company? These things will be, and must be; but how they shall be least hurtful, how least enticing, herein consists the grave and governing wisdom of a state. Impunity and remissness for certain are the bane of a commonwealth; but here the great art lies, to *discern in what the law is to bid restraint and punishment, and in what things persuasion only is to work.* If every action which is good or evil in man at ripe years were to be under pittance, prescription, and compulsion, what were virtue but a name, what praise could be then due to well doing, what gramercy to be sober, just, or continent? Many there be that complain of divine providence for suffering Adam to transgress. Foolish tongues! when God gave him reason, he gave him freedom to choose, for reason is but choosing; he had been else a mere artificial Adam, such an Adam as he is in the motions. We ourselves esteem not of that obedience, or love, or gift which is of force; God therefore left him free, set before him a provoking object, ever almost in his eyes: herein consisted his merit, herein the right of his reward, the praise of his abstinence. Wherefore did he create passions within us, pleasures round about us, but that these rightly tempered are the very ingredients of virtue? They are not skilful considerers of human things, who imagine to remove sin, by removing the matter of sin; for, besides that it is a huge heap increasing under the very act of diminishing, though some part of it may for a time be withdrawn from some persons, it cannot from all, in such a universal thing as books are; and when this is done, yet the sin remains entire. Though ye take from a covetous man all his treasure, he has yet one jewel left, ye cannot bereave him of his covetousness. Banish all objects of lust, shut up all youth into the severest discipline that can be exercised in any hermitage, ye cannot make them chaste, that came not thither so: such great care and wisdom is required to the right managing of this point. Suppose we could expel sin by this means; look how much we thus expel of sin, so much we expel of virtue: for the matter of them both is the same: remove that, and ye remove them both alike. This justifies the high providence of God, who though he commands us temperance, justice, continence, yet pours out before us even to a profuseness all desirable things, and gives us minds that can wander beyond all limit and satiety. Why should we then affect a rigour contrary to the manner of God and of nature,

by abridging or scanting those means which books, freely permitted, are both to the trial of virtue, and the exercise of truth? It would be better done, to learn that the law must needs be frivolous, which goes to restrain things, uncertainly and yet equally working to good and to evil. And were I the chooser, a dram of well doing should be preferred before many times as much the forcible hinderance of evil doing. For God sure esteems the growth and completing of one virtuous person, more than the restraint of ten vicious."

Milton then notices the fact, the same as happens at the present day, that the law did not have effect. "Do we not see, not once or oftener, but weekly, that continued court-libel against the parliament and city, printed, as the wet sheets can witness, and dispersed among us for all that licensing can do? Yet this is the prime service a man would think wherein this order should give proof of itself. If it were executed, you will say."

He shows that the law cannot have effect, and the same may be said in regard to unstamped newspapers.

"But certain, if execution be remiss or blindfold now, and in this particular, what will it be hereafter, and in other books? If then the order shall not be vain and frustrate, behold a new labour, lords and commons, ye must repeal and proscribe all scandalous and unlicensed books already printed and divulged; after ye have drawn them up into a list, that all may know which are condemned, and which not; and ordain that no foreign books be delivered out of custody, till they have been read over. This office will require the whole time of not a few overseers, and those no vulgar men. There be also books which are partly useful and excellent, partly culpable and pernicious; this work will ask as many more officials to make expurgations and expunctions, that the commonwealth of learning be not damnified. In fine, when the multitude of books increase upon their hands, ye must be fain to catalogue all those printers who are found frequently offending, and forbid the importation of their whole suspected typography. In a word, that this your order may be exact, and not deficient, ye must reform it perfectly according to the model of Trent and Sevil, which I know ye abhor to do. Yet though ye should condescend to this, which God forbid, the order still would be but fruitless and defective to that end whereto ye meant it. If to prevent sect and schisms, who is so unread or uncatechised in story, that hath not heard of many sects refusing books as a hinderance, and preserving their doctrine unmixed for many ages, only by unwritten traditions? The christian faith, (for that was once a schism!) is not unknown to have spread all over Asia, ere any gospel or epistle was seen in writing. If the amendment of manners be aimed at, look into Italy and Spain, whether those places be one scruple the better, the honester, the wiser, the chaster, since all the inquisitional rigour that hath been executed upon books."

In the next Number, the evils, produced by this limitation, this licensing, as pourtrayed so forcibly by Milton, will be detailed.

To the Editor of the Anthropological Magazine.

EVILS AND THEIR NATURAL CAUSES.

Sir,—What are the evils man is subject to, that may not be traced finally to natural causes? A few as a specimen,

Will oblige, Your's,

INQUIRER.

MUSCULAR EXERCISE. CRITICISMS ON ENGLISH BEAUTY. CONSUMPTION.

Sir,—Having read an article in the last month's Number of the Magazine, in which reference is made to the opinions of an American upon the method of *walking*, exhibited by British females, and finding that the description given by the author referred to is imperfect, I have sent the whole, with some prefatory and concluding observations.

The writer has a quick eye for seizing the prominent points of things, and presenting them smartly and with vivacity. Being a foreigner, he is struck with national appearances and peculiarities, which, from their frequency, are little noticed by us. Among the various topics on which the writer indulges, the one to be noticed is woman.

He says, "The women whom I saw were nearly all plump and comely; and their complexions were universally good, even in this dingy atmosphere. I have to remark, that they were almost all expressive, and many of them very beautiful. Moreover, they generally presented well formed, and often swan-like necks, reposing on nobly expanding bosoms. In descending, the analysis became less satisfactory, for their forms were *almost universally bad;* the upper part of the bodies were too large for the lower—the foundation seemed crushed by the weight of the superstructure. There was, of course, a limit to the observations one might make in the streets; but to a man of any observation, or at all knowing in matters of this nature, used to induction, or capable, from the habit of ratiocination, of remounting *from things seen and real to things hidden and unseen*, there was little risk of injustice in referring the *awkward bending of the ankle, to malformation above.* The feet were, for the most part, ponderous and flat, indicating both an inherent ugliness and defective shoeing. They were often crooked and full of excrescences; nor did *they always correspond exactly, or seem to be mates. Sometimes both had a leaning one way. The right foot out, and the left in, for instance.* I was more than once reminded of a stout double-

decker, with high poop and heavy counter, lying down in strong breezes under double-reefed top-sails.

The gait, of course, of women thus formed was shuffling, heavy, and lumbering, destitute alike of harmony and ease. Perhaps I cannot better convey an idea of the effect of this peculiar conformation upon the movements, than by citing the opposite conformation, and equally opposite movements of Taglioni."

Although the above description may be tinctured by the vanity and the prejudices of an American, it must be acknowledged that he suggests matters, which ladies will do well to turn to account. He has, without knowing it, borne testimony to the almost universality of *spinal complaints* among the English fair, and to their mischievous effects upon the figures and the movements of the sufferers. He is no misanthropist, for he commences his remarks by saying that our "women" have good complexions, that their countenances are expressive, &c. And when he states, that "the upper part of the trunk is too large for the lower—the foundation appeared crushed by the weight of the superstructure," the writer evidently alludes to what medical men call *lateral curvature of the spine*—a disease which afflicts at least forty-nine ladies out of fifty. In it there is a twist to the right between the shoulders, and another to the left in the loins. This double bend makes the body short and clumsy, or, as it were, *crushed* down. To an observant eye, the awkward turn of the ankle infers malformation above. The inference is strengthened by the fact, that the limbs do not always "correspond exactly or seem to be mates." He truly adds that it is oftentimes easy to judge of things hidden and unseen, from things seen and real. In this instance his judgment is correct, no contrivance or habiliment is sufficient to conceal distortions in the trunk, from persons of much observation. Besides the proofs given above, the non-conformity, and leaning of the limbs, indicate a twist in the lumbar spine, which, by deranging the pelvis, gives a disagreeable presentation to the feet, and an unsightly bend to the ankles.

Since it is impossible for the ladies to hide their bodily defects by any mode of dress, they will best consult their health, their comfort, and their personal attractions, by removing the *cause* as soon as it is discovered. I wish to impress this very important knowledge indelibly upon the minds of my fair readers, because, supposing them to be indifferent to outward appearances, a deformed frame is always accompanied with puny and delicate health, which may be relieved by medical treatment, but can never be eradicated. There is no middle course, they must either remove the cause, or suffer through life.

Should the preceding observations be acceptable to your readers, it shall be followed by other communications illustrative of the effects produced by spinal maladies.

MEDICUS.

MUSCULAR ACTION.—MISERIES FROM VIOLATION OF THE LAWS IN THE CASES OF FACTORY CHILDREN.

In the Essay in the preceding Number detailing some of the miseries among the opulent classes from the violation of the laws which regulate the muscular action; actions so essential, as was shown, to health. In this Essay some remarks will be made illustrative of the evils which result to the *working classes* of society from the excess of muscular exertion: evils equally illustrative of the punishments arising from the violation of the laws referred to: and which, when perceived as the results of the violation of these laws, will produce, it is hoped, a solid basis on which public opinion can be based, for the removal of those conditions which occasion these violations to take place.

The first class to which the attention is to be directed consists of The Factory Children.

A factory is a place where contrivances are devised by which a number of human beings can work together, and where, to render, this combined working successful, the operations of one class of individuals must in general be so timed in reference to the operations of another class of individuals, as that the one class may have finished their operations at the exact time when the others are ready to commence.

In order that the nature of these operations may be more readily understood, the following short description of a part of the processes in a cotton factory may be advantageously detailed.

In cotton factories there are several operations in which children are employed; and in these operations the children are perpetually upon their feet.

Throstle spinning is of this character, and in this girls are principally employed.

In mule spinning, the piecers, as they are called, are always on their feet.

The scavengers, who are children, have a slight variety: "They have to clean certain parts of the machinery whilst it is at work; and for this purpose have to lie down under the machinery."—*Rowland Detrosier's Evidence.*

In flax spinning, there are several processes which require constant exertion, and that in one direction, and in some of which children are employed. Thus, the flax is first drawn out by the hand. Those who do this are adults, and are called *hand-hecklers.* Those bundles are then sent to the machine, to fit them for which, each bundle is screwed between two bars of iron. *Children* do this. These are called *screwers*, and must be very quick and incessant in their exertions, because these bundles are delivered to a third class of workers, called *machine-winders*, who fix them upon heckles or spikes fastened upon cylinders, which revolve with great rapidity. Mr. Commissioner Drinkwater, referring to the screwer observes,

"His labour appears to me to be, beyond comparison, the most fatiguing that I have seen children subjected to."

These operations thus severe, ought, it seems rational to conclude, to be continued for a short period of time: otherwise it is evident, as in these operations certain muscles are kept in a state of almost permanent contraction, the individuals must suffer much, and must bring about affections of these muscles.

The system, which prevailed till parliament undertook to remedy many evils which had arisen, was one which, so far from being in accordance with this limitation of time, which humanity and science both dictate, was in direct opposition. Children of the youngest years were worked twelve and fourteen hours a-day.

The consequences were most distressing, as might be concluded.

And when it is remarked that the muscles are attached to the bones, that the most important part of the bony system is the *spinal column*, and that this is most acted upon in the erect positions of the body, no difficulty will occur in believing that *deformities* must be produced by these excessive exertions.

Indeed, it is easy to believe that one of the parliamentary commissioners, appointed to inquire into the condition of the factory system, is right, when he asserts, "The cases of deformity that were examined before the committee resulted, in almost every instance, from the extravagantly long hours of labour."—*Drinkwater's Report*, p. 170.

Still further to evidence the connexion between the long hours of labour and the production of deformity, this commissioner notices the fact, that at Bradford, a greater number of cripples are to be met with than at other places in Yorkshire; and there the regular hours are longer by one hour than at Leeds; and further, the practice of taking very young children prevails to a much greater degree.

However, though deformity does not in all cases result, the constitution must be injured. Exhaustion of the most distressing character must be produced: education must be excluded, for the children cannot study when the body is worn out: ignorance must spread: and vice will follow in the train.

To show the sufferings which children endure, the following extracts from the Report of the Factory Commissioners, may be useful and instructive.

"The statements of the children, and more especially of the younger children, as to their own feeling of fatigue, may be said to be uniform. The intensity of the feeling is influenced, without doubt, by the age of the child, and the constitutional robustness or feebleness of the individual; but the feeling itself is always the same, and differs only in degree. The expressions of fatigue are the strongest and the most constant on the part of the young children employed in the factories in Scotland, because there the ordinary hours of work are in general longer by an hour or an hour and a quarter than in the factories in England. We have been struck with the perfect uniformity of the answers returned to the commissioners by the young workers in this country, in the largest and best regu-

lated factory, as well as in the smaller and less advantageously conducted. In fact, whether the factory be in the pure air of the country or in the large town; under the best or the worst management; and whatever be the nature of the work, whether light or laborious; or the kind of treatment, whether considerate and gentle, or strict and harsh; the account of the child, when questioned as to its feelings of fatigue, is the same. The answer always being, 'Sick tired, especially in the winter nights.' 'So tired when she leaves the mill that she can do nothing.' 'Feels so tired, she throws herself down when she gangs home, no caring what she does.' 'Often much tired and feels sore, standing so long on her legs.' 'Often so tired she could not eat her supper.' 'Night and morning very tired: has two sisters in the mill: has heard them complain to her mother, and she says they must work.' 'When the tow is coarse we are so tired we are not able to set one foot by the other.' 'Whiles I do not know what to do with myself, as tired every morning as I can be.'

"Young persons of more advanced age, speaking of their own feelings when younger, give to the commissioners such expressions as the following: 'Many a time has been so fatigued that she could hardly take off her clothes at night, or put them on in the night; her mother would be raging at her, because when she sat down she could not get up again through the house.' 'Looks on the long hours as a great bondage.' 'Thinks they are no much better than the Israelites in Egypt, and their life is no pleasure to them.' 'When a child, was so tired that she could seldom eat her supper, and never woke of herself.' 'Are the hours to be shortened?' earnestly demanded one of the girls of the commissioner who was examining her, 'for they are too long.'

"The truth of the account given by the children of the fatigue they experience by the ordinary labour of the factory, is confirmed by the testimony of their parents. In general the representation made by parents is like the following: 'Our children come home so tired and worn out they can hardly eat their supper.' 'Has often seen his daughter come home in the evening so fatigued that she would go to bed supperless.' 'Has seen the young workers absolutely oppressed, and unable to sit down or rise up, this has happened to his own children.' p. 25, 26.

"The overlookers testify to the accuracy of these statements. So do the managers. The latter state that the children 'anxiously inquire for the hour of stopping.' 'I have known the children,' says one witness, 'hide themselves in the stove among the wool, so that they should not go home when the work was over, when we have worked till ten or eleven. I have seen six or eight fetched out of the stove and beat home: beat out of the mill however. I do not know why they should hide themselves, unless that they were too tired to go home.'

"In the district of Lancashire, an overlooker who was examined states, 'I found, when I was an overlooker, that after the children from eight to twelve years, had worked eight, nine, or ten hours they were nearly ready to faint: some were asleep: some were

kept to work only by being spoken to, or by a little chastisement to make them jump up. I was sometimes obliged to *chastise them when they were almost fainting*, and it hurt my feelings: then they would spring up and work pretty well for another hour; but the last two or three hours were my hardest work, for they got so exhausted."

These facts, surely, are sufficient to demonstrate that the degree of muscular exertion required of these children, is in violation of the laws appointed by the Creator for the production of health, by a proper amount of muscular exercise.

One fact more, however, may be stated as showing the effect of this *oneness* of muscular exertion upon the mind of the child. An overlooker states, " I have seen them (the children, the piecers) fall asleep, and they have been *performing their work with their hands while they were asleep*, after the tilley has stopped, when their work was over; I have stopped and looked at them for two minutes, going through the motions of piercing fast asleep, when there was really no work to do, and they were really doing nothing.

The female constitution being more delicate than the male, and being subject to changes to which the male constitution is not, must, it is presumed, suffer most. The following is from the Report.

" Girls suffer from pain more commonly than boys, and up to a more advanced age; though occasionally men, and not unfrequently young women, and women beyond the meridian of life, complain of pain, yet there is evidence that the youngest children are so distressed by pain of their feet, in consequence of the long standing, that they sometimes throw off their shoes, and so take cold. ' Feet feel so sair that they make him greet.' ' Was quite well when she went to the mill, but the confinement brought on a complaint in the head, and her left side is now pained.' ' Many nights I do not get a wink of sleep for the pain.' ' At first suffered so much from the pain that he could hardly sleep, but it went off.' ' Knee failed from excessive labour; severe pains and aches would come on, particularly in the morning; it was better in the evening; felt no pains in any other parts. There were two or three complaining at the same time of their knees aching.' ' I have seen children under eighteen years of age before six at night, their legs has hurt them to that degree that they have many a time been crying.' "

Yet the present Government have brought in a bill this session to lengthen the hours of labour. Let the peeople awake. The subject will be again referred to in the next Number.

PHRENOLOGY, BY JOHN EPPS, M. D.

Essay VIII.

The organ to be noticed next is that of *Conscientiousness.** It is situated on each side of the organ of firmness, and when large, gives a great elevation and breadth to the sides of the upper part of the head. When large, and firmness small, the head, as in the case of Mr. H., presents two elevations, and a central depression.

Dr. Spurzheim discovered this organ.

Some phrenologists profess to doubt the existence of this organ. The Essayist, however, has seen so many striking instances of its existence in development and in manifestation, that he has not the slightest doubt of its existence. In cases of insanity in which the conviction of sin is very strong, and, in which, in addition there is a feeling of despair, conscientiousness and cautiousness are large, and hope is small. The Essayist has seen many instances of this kind.

This faculty is blind. It does not determine what is just, but merely when what is just is placed before it, it approves of the same.

The importance of the establishment of this as a power of the mind, as a primitive tendency, must be evident to every reflecting mind. For hitherto philosophy has laboured hard to establish that our views of right and wrong are quite independent of such a primitive tendency: philosophy has considered "all morality as adventitious, without any original tendencies in the mind that could, of themselves, lead man to approve or disapprove. Thus, Hobbes denied all original obligation of justice, but ascribes to *political enactment*, and the authority thence arising, the notions of just and unjust, with all the kindred notions involved in them: Mandeville ascribed morality to human contrivance; he considering the general praise of virtue to be a mere artifice of political skill; and that the moral virtues are "the political offspring which flattery begot upon pride:" Clarke represented virtue as merely the regulation of our conduct according to certain fitnesses we perceive in things, or a peculiar congruity of certain relations to each other: Wollaston regarded virtue as consisting in acting according to the truth of things; Hume made utility the constituent of virtue.

Such opinions have been promulgated. Dr. Brown, in his Philosophy of the Human Mind, has satisfactorily refuted these opinions: but it is to phrenology that mankind are indebted for establishment of the truth, that the Creator has connected with a particular portion of the brain, the sense of right and wrong.

---

* Marked No. 17.

It is thus that positive evidence is afforded to the declaration made in the Scriptures, that some men "are a law to themselves," this law being written upon man's original constitution, and acting in him, more or less, under every circumstance of life.

Individuals having this organ but weakly developed are very apt to believe in the truth of the expression of Bonaparte, that every man has his price. They are men of expediency; sneer at principle. They are followers of Themistocles, and not of Aristides.*

Individuals having this organ large are fond of the aphorism, "Be just before you are generous."

Remorse is connected with the activity of this organ.

Sorrow also.

Grief seems to be allied to benevolence.

The next organ is that of Hope†.

This organ is situated anterior to the organ of conscientiousness, and on the side of the organ of veneration. When large, together with the organ of veneration, it makes the central part of the crown of the head large and elevated.

This organ was discovered by Dr. Spurzheim.

The function of this organ seems to be hope: that is, the expectation of realizing what the other faculties desire. It is thus, as Dr. Spurzheim pointed out, very different from desire: since a thing may be *desired* which cannot be *hoped* for. A man under sentence of death for a most atrocious murder may desire to be pardoned, but knowing that the case is so strong against him, he has not the least hope that he will.

This faculty seems, in its combined activity, to recognize the *belief in the future.* It appears to give the power of contemplating a future state of existence.

It seems also to be intimately connected with *faith:* faith being the substance of things hoped for; that is, the state of satisfaction arising from this power of mind being able to contemplate the realization of certain things. It is also the evidence of things not seen: in other words, the activity of this faculty produces a satisfaction so great that it gives an irresistible evidence, by the powerful effect of the perception of these things as objects of realization.

This belief in immortality, as dependent upon the endowment of man by the Creator with a particular power, is a striking evidence of the existence of immortality: and although the Christian will ever maintain that life and *immortality were* BROUGHT TO

---

* In the war of the Grecks with the Persians, Themistocles stated in the assembly of the Athenians, that he had something to communicate of service to the state: but that he must communicate to one single individual to decide whether it should be done. They appointed Aristides. The plan was to burn the fleet of the Lacedæmonians, which could easily be effected, being at that time lying at a port to which the Athenians could easily proceed. Aristides heard the proposal, and reported to the Athenians, that the advice might be *useful* but it was not *honourable.* The Athenians refused to adopt it.

† Marked No. 15.

LIGHT by the revelations of the Saviour of men, yet, at the same time, he may with confidence assert that a bright glimmering existed in the minds of all.

Savages seem to have this feeling. Pope refers most beautifully to this feeling in the following lines:—

> Lo! the poor Indian whose untutored mind
> Sees God in clouds, or hears him in the wind;
> His soul proud science never taught to stray
> Far as the solar walk or milky way;
> Yet simple nature to his hope has given
> Behind the cloud-topt hill, an humble heaven.
> Some safer world in depth of wood embraced,
> Some happier island in the watery waste;
> Where slaves once more their native land behold,
> No fiends torment, no Christians thirst for gold.

The effects of this organ, when large and too active, are to produce hope when there exists no satisfactory reason for hope. Some men are always hoping: these are endowed with this organ large. Speculators have this organ large.

It has often been observed that consumptive patients are strong in hope. They hope to get better when death is almost touching them. It would form an interesting inquiry whether this hope depends upon the phenomena of the disease, or whether the state of mind possessed by consumptive patients, is one which is connected with the development of the organ of hope, producing that neglect of care in the preservation of health, as to obtain so great a power for the disease, which at length is enabled to vanquish the powers of life.

The next organ is that of IMITATION.*

This organ is situated on each side of the organ of benevolence, and anterior to that of the organ of hope.

Dr. Gall was led to the discovery of this organ by the circumstance that a gentleman, by name Hannibal, who had great power to represent what he had seen, asked him to examine his head, because he had a transverse furrow in the midst of it. Dr. Gall observed this: but at the same time observed, at the superior part of the forehead, a considerable elevation of a globular form.

Dr. Gall met afterwards with several individuals, who had great power of imitation, and he found them to be developed in the same part as found largely developed in Mr. Hannibal.

So many observations have been made in reference to this organ that no doubt exists both as to its situation and to its functions.

It is large in actors.

It is large in the bust of Clara Fisher.

---

* Marked No. 33.

This organ is in general more developed in children than in adults; a fact which teaches this most important lesson, that the best examples should be placed before children.

The fact of the existence of this organ in children, and the consequent tendency thence arising on the part of children to mimic those whom they behold, ought to lead instructors to watch over the young so as to prevent them from imitating objects of distress and of misfortune.

The fact of the existence of this organ, in connexion with benevolence, teaches the necessity of connecting the activity of benevolence with the activity of imitation. It teaches the necessity of presenting a Howard, an Oberlin, a Fenelon, a Watt, before the minds of the rising race, instead of the Alexanders, the Bluchers, or other warriors who have waded through seas of blood to gain glory.

This organ of imitation seems to be necessary to the good portrait painter, the sculptor.

This feeling in its unguided activity leads to spurious devotion. It has induced many fanatics to put thorns around their brows; and even some to crucify themselves.

And, recollecting that man is endowed with this organ, enabling him to imitate the objects which he beholds, how much gratitude should man feel towards the Creator, who sent the Saviour of men to exhibit an *example* of moral, intellectual, and religious perfection, so as to lead men to follow the same.

And when it is remembered that the organ of imitation lies on each side of the organ of benevolence, man should be taught that this organ should be exercised in imitating acts of benevolence, in the exhibition of those virtues which will end in producing peace on the earth, and good will amongst men.

Having thus noticed the two central lines of the moral organs, and pointed out the relations which they bear to each other, the next line, external and lateral to the one last described (namely, that embracing conscientiousness, hope, and imitation), will be examined.

The first organ is that of Wonder.*

This organ is situated on the outer side of the organ of imitation: and gives when large a fullness and a roundness on the upper and front part of the head.

This organ was discovered by Dr. Gall. In the first fanatic whose skull he examined, he found the part correspondent to the situation of this organ largely developed. The same development he observed in the celebrated Dr. Jung Stilling, who published a work in exposition of apparitions, and who had gone through the several metamorphoses of a tailor, a tutor, a doctor in medicine, a moralist, a divine, a journalist, an illuminatus, and a visionary. At Berne, in the Maison de Detention, Dr.

* Marked *Blank*.

Gall saw a fanatic, who believed that Jesus Christ, surrounded by a brilliant light, as if a million of suns had combined their splendour, had appeared to him to reveal the true religion. A gentleman at Paris asked Dr. Gall to examine his head. Gall did, and remarked, "You sometimes see visions and believe in apparitions." The gentlemen started with astonishment, and acknowledged that he had frequent visions: and added, that before this acknowledgment, he had never mentioned the circumstance to any one for fear of being thought credulous.

A man, named Hallaran, resident at Vienna, imagined himself continually accompanied by a familiar spirit. He saw and conversed with it. When 60, his genius appeared as if wishing to leave him, and favoured him with his presence only on certain days of the month.

Many similar examples Gall met with, and in all individuals having these convictions he found this organ large.

The discovery of this organ will enable the phrenologist to understand the fact, that some of the most talented men believe in the existence of disembodied spirits, and supernatural communications. It is well-known that Socrates, whose power of reasoning must be known to all, believed in the existence of a daimōn, (δαιμων), who attended him and advised with him.

Tasso, well known as the author of the splendid poem, The Fall of Jerusalem, asserted that he was cured of a malady under which he laboured, by the aid of the Virgin Mary and St. Scholastic, who appeared to him during a violent attack of fever.

Other instances might be adduced. One in particular is worthy of notice. Swedenborg, who was a most profound philosopher, and most intimately acquainted with the *facts* of almost all the *exact* sciences, experienced frequent communications with the spiritual world, and has published these revelations, which are now received as true by some of the most enlightened men in this and in other countries. In a valuable and very old picture of this individual, in the possession of the Essayist's friend, Mr. Dunn, of Pentonville, this organ is represented large, affording thus a striking coincidence between the manifestation of the power and the existence of this organ.

Having detailed these circumstances, it may be proper to inquire what is the power connected with this particular part of the brain?

It seems to be that of the perception of supernatural objects; or, perhaps, the capability of appreciation of objects that are generally defined as spiritual. It may take various directions. It may, when abused, lead to a diseased taste in producing an excessive fondness for wonders, and superstitious absurdities. It may lead its possessor to believe in dreams, in sorcery, magic, and the abuses connected with astrology.

The question occurs, Whether or not this belief in supernatural objects is an absurdity? The answer to this, viewed phrenologically is, that nothing is to be considered as essentially absurd which is connected with the activity of any particular organ, when that organ is large. Because, if we judge of the existence of the feeling

of benevolence, by finding that the largeness of the head in a particular part is attended with the manifestation of the feeling strong, it is equally just to conclude, that, if, whenever the part of the head connected with the organ of wonder is large, the capability of recognizing the existence of objects, commonly called supernatural, is proportioned thereto, the power of having belief in supernatural objects is the legitimate function of this particular part of the brain. It is true, that when the absurdities which have originated in connexion with this particular power in manifestation are viewed, the mind may be led to repudiate all activities of this power, yet reflection must convince that such repudiation is not philosophical.

The correct and fair thinker is bound to acknowledge the facts, and to seek explanation: it is the character of a fool, or of an intellectual coward, to deny the fact and to refuse the explanation.

The conclusion already stated, appears justified; namely, that this particular part of the brain has connected with it the power of appreciating the existence of spiritual objects; and, situated as it is before the organ of hope, the connexion will favor the accuracy of this view. Hope relating to the expectation of events that may arrive, and which acting in reference to a future state, gives a kind of evidence of immortality: while wonder enables the individual to appreciate the existences of that state of futurity with which hope has brought the individual into acquaintance.

These remarks on this organ have been thus extended, because many are apt to ridicule the activity of this organ; a ridicule, partly justified by the very great absurdities into which some visionaries have passed. This, however, in a properly constituted mind, will not remain long as a barrier to the belief in the power associated with this organ.

It may be proper to notice the fact that Dr. Johnson was a believer in ghosts. Dr. Chalmers, who has this organ large, wandered into the fields of astronomy, and has created a world of his own: he manifests the activity of this organ in many ways, one in particular, namely, in the coining of new words. Mr. Hazlitt and Mr. Tennant have the same mental tendency, and in each of their heads the organ is large.

Shakspeare manifests the activity of this organ in his writings, and, in the busts and the drawings of his head this organ is large.

Sir Walter Scott's bust presents this organ large, and its activity is constantly evident in his writings.

Persons having this organ large are frequent in the use of the words, *wonderful*, *astonishing*.

And here it may be proper to notice the difference between *surprise*, *wonder*, and *astonishment*, as connected with this particular subject.

Dr. Adam Smith thus defines the difference between surprise and wonder: "We are *surprised* at those things which we have seen often, but which we least of all expected to meet with in the place we find them: we are surprised at the sudden appearance of a friend whom we have seen a thousand times, but whom we did not imagine we were to see then."

" We *wonder* at all extraordinary and uncommon objects, at all the rare phenomena of nature, at meteors, comets, eclipses, at singular plants and animals, and at every thing, in short, with which we have been either little or not at all acquainted, and we still wonder, though forewarned, of what we are to see."

Dr. Brown makes the distinction between surprise and wonder to be dependent upon the difference *in duration* of the emotion produced by the presentation to our mind of the result unexpected by us to result from the previous order of events.

The Essayist, however, thinks that the difference is dependent upon the state of the mind itself, in reference to the development of this organ under consideration. A man, endowed with this organ large, will feel wonder, where another with the organ small will express merely surprise. So that surprise and wonder seem to be conditions of mind connected with the state of the development of this particular organ.

Thus one man will observe on seeing a candle burn, " how wonderful it is that the candle should burn." Another man will not perceive it at all as astonishing, but as a matter of course, and may be inclined to consider the other as a fool; and thus difference of opinion will result, though both are equally well informed as to the chemical nature of tallow and the chemical nature of flame.

Astonishment refers more particularly to the state of mind produced by the excitement of the feeling of surprise or of wonder: in the same manner as the *understanding* refers to the state of mind connected with those mental activities which have enabled the individual to obtain *knowledge* and *wisdom*.

LINES

On reading the malicious paragraph respecting the wife of the Bishop of Norwich, in which it was stated that she was a Catholic, and had a Catholic priest in the house of the Bishop, the fallacy of which was exposed in *The Bury Post* of March 17, 1836.

Dear aged man,* thy tenement of clay,
Which seem'd too feeble for a lengthen'd day,
Still keeps thy spirit from its destin'd home,
Alone through life's long widow'd years to roam.
Yet must thou feel the spleen of party strife,
Which seeks to wound thee through thy sainted wife.
Most vain attempt! Oh! that it knew thy mind,
Which overflows with love to all mankind.
Come, happy day, when all shall feel the same,
Their feuds forget, and Israel be their name.

---

* The Bishop is beyond the period allotted to man, namely, three score years and ten.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

MAY 1, 1836.

REPEAL OF THE TAXES UPON KNOWLEDGE.—A LETTER OF THE POET, JOHN MILTON.

In the preceding Number the arguments, the strong, the unanswerable arguments, of John Milton against the *licensing* of books, were brought to apply to the demonstration of the iniquity of the principle implied in the enactment of *taxes upon knowledge*. It was there shown that the putting of a stamp upon papers conveying political information was the virtual enforcement of a licensing act: and that this stamp acted in excluding all but the more opulent from the obtaining that most valuable information, known under the name of political knowledge. It was shown also, that the *reduction of the amount of the stamp*, though useful in extending the sphere of the circulation of this political information, would still operate against the general diffusion of such information, besides involving a continued manifestation of the absurd principle, that political knowledge is either so bad as to require a tax upon it to prevent its circulation, or so good, as to render it necessary that people should pay a good price for it.

The remaining remarks of John Milton, showing the evils arising from the licensing system, evils equally chargeable to the rendering *political* information difficult of obtainment, are now recorded.

Milton shows that to license an author's book is an insult of the worst kind to the author, and will be a most direful injury to the service of God and truth: and asks, in his peculiar forcible style, "What advantage is it to be a man, over it is to be a boy at school, if we have only escaped the ferula, to come under the fescue of an imprimatur? If serious and elaborate writings, as if they were no more than the theme of a grammar-lad under his pedagogue, must not be uttered without the cursory eyes of a temporizing and extemporizing licenser? He who is not trusted with his own actions, his drift not being known to be evil, and standing to the hazard of law and penalty, has no great argument to think himself reputed in the commonwealth wherein he was born for other than a fool or a foreigner. When a man writes to the world, he summons up all his reason and deliberation to assist him; he searches, meditates, is industrious, and likely consults and confers with his judicious friends; after all which done, he takes himself to be informed in what he writes, as well as any that writ before him; if in this the

most consummate act of his fidelity and ripeness, no years, no industry, no former proof of his abilities can bring him to that state of maturity, as not to be still mistrusted and suspected, unless he carry all his considerate diligence, all his midnight watchings, and expence of Palladian oil, to the hasty view of an unleisured licenser, perhaps much his younger, perhaps far his inferior in judgment, perhaps one who never knew the labour of bookwriting; and if he be not repulsed, or slighted, must appear in print like a puny with his guardian, and his censor's hand on the back of his title to be his bail and surety, that he is no idiot or seducer; it cannot be but a dishonour and derogation to the author, to the book, to the privilege and dignity of learning. And what if the author shall be one so copious of fancy, as to have many things well worth the adding, come into his mind after licensing, while the book is yet under the press, which not seldom happens to the best and diligentest writers: and that, perhaps, a dozen times in one book. The printer dares not go beyond his licensed copy; so often then must the author trudge to his leave-giver, that those his new insertions may be viewed; and many a jaunt will be made, ere that licenser, for it must be the same man, can either be found, or found at leisure; meanwhile either the press must stand still, which is no small damage, or the author lose his accuratest thoughts, and send the book forth worse than he had made it, which to a diligent writer is the greatest melancholy and vexation that can befal. And how can a man teach with authority, which is the life of teaching; how can he be a doctor in his book as he ought to be, or else had better be silent, whenas all he teaches, all he delivers, is but under the tuition, under the correction of his patriarchal licenser, to blot or alter what precisely accords not with the hide-bound humour which he calls his judgment? When every acute reader upon the first sight of a pedantic license, will be ready with these like words to ding the book a coit's distance from him, I hate a pupil teacher, I endure not an instructor that comes to me under the wardship of an overseeing fist. I know nothing of the licenser, but that I have his own hand here for his arrogance; who shall warrant me his judgment? The state, sir, replies the stationer: but has a quick return, the state shall be my governors, but not my critics; they may be mistaken in the choice of a licenser, as easily as this licenser may be mistaken in an author. This is some common stuff; and he might add from Sir Francis Bacon, that 'such authorized books are but the language of the times." For though a licenser should happen to be judicious more than ordinary, which will be a great jeopardy of the next succession, yet his very office and his commission enjoin him to let pass nothing but what is vulgarly received already. Nay, which is more lamentable, if the work of any deceased author, though never so famous in his lifetime, and even to this day, comes to their hands for license to be printed, or reprinted, if there be found in his book one sentence of a venturous edge, uttered in the height of zeal, (and who knows whether it might not be the dictate of a divine spirit?), yet not suiting with every low decrepit humour of their own, though it were

Knox himself, the reformer of a kingdom, that spake it, they will not pardon him their dash; the sense of that great man shall to all posterity be lost, for the fearfulness, or the presumptuous rashness of a perfunctory licenser. And to what an author this violence hath been lately done, and in what book of greatest consequence to be faithfully published, I could now instance, but shall forbear till a more convenient season. Yet if these things be not resented seriously and timely by them who have the remedy in their power, but that such iron-moulds as these shall have authority to gnaw out the choicest periods of exquisitest books, and to commit such a treacherous fraud against the orphan remainders of worthiest men after death, the more sorrow will belong to that hapless race of men whose misfortune it is to have understanding. Henceforth let no man care to learn, or care to be more than worldly wise; for certainly in higher matters to be ignorant and slothful, to be a common stedfast dunce, will be the only pleasant life, and only in request."

The remarks equally apply to the injurious influence of stamps upon papers containing political information. How many noble minded men have been prevented from sending their thoughts into the world, on account of the expence connected with the publication of political information? Under the night-mare oppression of a stamp, acting as a licensing system upon such individuals, their thoughts are lost to the public. And why is the public to be deprived of their thoughts? This is an insult offered to the nation, as Milton proceeds to show.

"And as it is a particular disesteem of every knowing person alive, and most injurious to the written labours and monuments of the dead, so to me it seems an undervaluing and vilifying of the whole nation. I cannot set so light by all the invention, the art, the wit, the grave and solid judgment which is in England, as that it can be comprehended in any twenty capacities how good soever; much less that it should not pass except their superintendence be over it, except it be sifted and strained with their strainers, that it should be uncurrent without their manual stamp. Truth and understanding are not such wares as to be monopolized and traded in by tickets, and statutes, and standards. We must not think to make a staple commodity of all the knowledge in the land, to mark and license it like our broad cloth and our woolpacks, (stamp mark). What is it but a servitude like that imposed by the Philistines, not to be allowed the sharpening of our own axes and coulters, but we must repair from all quarters to twenty licensing forges? (Stamp office.) Nor is it to the common people less than a reproach; for if we be so jealous over them, as that we dare not trust them with an English pamphlet, what do we but censure them for a giddy, vicious, and ungrounded people; in such a sick and weak state of faith and discretion, as to be able to take nothing down but through the pipe of a licenser? That this is care or love of them, we cannot pretend, whenas in those popish places, where the laity are most hated and despised, the same strictness is used over them. Wisdom we cannot call it, because it stops but one breach of license,

nor that neither: whenas those corruptions, which it seeks to prevent, break in faster at other doors, which cannot be shut."

After referring to the interesting fact of his having visited the famous Galileo, then grown old, "a prisoner to the inquisition, for *thinking in astronomy otherwise than the franciscan and dominican licensers thought*," Milton makes a remark, showing that, in his day, every license was to be granted to the press, when the party in power wished to use it for any particular purpose: "While bishops were to be baited down, then all presses might be open; it was the people's birthright and privilege in time of parliament, it was the breaking forth of light. But now the bishops abrogated and voided out of the church, as if our reformation sought no more but to make room for others into their seats under another name; the episcopal arts begin to bud again; the cruise of truth must run no more oil; liberty of printing must be enthralled again under a prelatical commission of twenty; the privilege of the people nullified; and which is worse, the freedom of learning must groan again, and to her old fetters: all this the parliament yet sitting."

Then follows one of the most splendid passages that, perhaps, was ever penned. The sentiments are the solidity of truth.

"Well knows he who uses to consider, that our faith and knowledge thrives by exercise, as well as our limbs and complexion. Truth is compared in Scripture to a streaming fountain; if her waters flow not in a perpetual progression, they sicken into a muddy pool of conformity and tradition. A man may be a heretic in the truth; and if he believe things only because his pastor says so, or the assembly so determines, without knowing other reason, though his belief be true, yet the very truth he holds becomes his heresy. There is not any burden, that some would gladlier post off to another, than the charge and care of their religion. There be, who knows not that there be of protestants and professors, who live and die in as errant and implicit faith, as any lay papist of Loretto. A wealthy man, addicted to his pleasure and his profits, finds religion to be a traffic so entangled, and of so many piddling accounts, that of all mysteries he cannot skill to keep a stock going upon that trade. What should he do? Fain he would have the name to be religious, fain he would bear up with his neighbours in that. What does he therefore, but resolves to give over toiling, and to find himself out some factor, to whose care and credit he may commit the whole managing of his religious affairs; some divine of note and estimation that must be. To him he adheres, resigns the whole warehouse of his religion, with all the locks and keys, into his custody; and, indeed, makes the very person of that man his religion; esteems his associating with him a sufficient evidence and commendatory of his own piety. So that a man may say his religion is now no more within himself, but is become a dividual movable, and goes and comes near him, according as that good man frequents the house. He entertains him, gives him gifts, feasts him, lodges him; his religion comes home at night, prays, is liberally supped, and sumptuously laid to sleep; rises, is saluted, and after the malmsey,

or some well-spiced bruage, and better breakfasted, than he whose morning appetite would have gladly fed on green figs between Bethany and Jerusalem, his religion walks abroad at eight, and leaves his kind entertainer in the shop trading all day without his religion.

"Another sort there be, who when they hear that all things shall be ordered, all things regulated and settled; nothing written but what passes through the customhouse of certain publicans that have the tonnaging and poundaging of all freespoken truth; will straight give themselves up into your hands, make them and cut them out what religion ye please: there be delights, there be recreations and jolly pastimes, that will fetch the day about from sun to sun, and rock the tedious year as in a delightful dream. What need they torture their heads with that which others have taken so strictly, and so unalterably into their own purveying? These are the fruits which a dull ease and cessation of our knowledge will bring forth among the people. How goodly, and how to be wished were such an obedient unanimity as this! What a fine conformity would it starch us all into! Doubtless a staunch and solid piece of framework, as any January could freeze together."

Substitute the word "politics" for "religion," and then, in this passage, we have pourtrayed the evils of stamp duties upon political information: these putting this information out of the reach of the mass, which takes away the interest they otherwise would take in these matters, and thus, from ignorance, they become the tools of tyrants and knaves.

He then describes the injury that would result to truth from this licensing: injuries equally great in regard to political truth are inflicted by the stamp duty on newspapers.

"Truth indeed," he observes, "came once into the world with her divine master, and was a perfect shape most glorious to look on: but when he ascended, and his apostles after him were laid asleep, then straight arose a wicked race of deceivers, who, as that story goes of the Egyptian Typhon with his conspirators, how they dealt with the good Osiris, took the virgin Truth, hewed her lovely form into a thousand pieces, and scattered them to the four winds. From that time ever since, the sad friends of Truth, such as durst appear, imitating the careful search that Isis made for the mangled body of Osiris, went up and down gathering up limb by limb still as they could find them. We have not yet found them all, lords and commons, nor ever shall do, till her master's second coming; he shall bring together every joint and member, and shall mould them into an immortal feature of loveliness and perfection. Suffer not these licensing prohibitions to stand at every place of opportunity, forbidding and disturbing them that continue seeking, that continue to do our obsequies to the torn body of our martyred saint. We boast our light; but if we look not wisely on the sun itself, it smites us into darkness. Who can discern those planets that are oft combust, and those stars of brightest magnitude, that rise and set with the sun, until the opposite motion of their orbs bring them to such a place in the firmament, where they may be seen evening or

morning? The light which we have gained, was given us, not to be ever staring on, but by it to discover onward things more remote from our knowledge. It is not the unfrocking of a priest, the unmitring of a bishop, and the removing him from off the presbyterian shoulders, that will make us a happy nation; no, if other things as great in the church, and in the rule of life, both œconomical and political, be not looked into and reformed, we have looked so long upon the blaze that Zuinglius and Calvin have beaconed up to us, that we are stark blind. There be who perpetually complain of schisms and sects, and make it such a calamity that any man dissents from their maxims. It is their own pride and ignorance which causes the disturbing, who neither will hear with meekness, nor can convince, yet all must be suppressed which is not found in their Syntagma. They are the troublers, they are the dividers of unity, who neglect and permit not others to unite those dissevered pieces which are yet wanting to the body of truth. To be still searching what we know not, by what we know, still closing up truth to truth as we find it, (for all her body is homogeneal, and proportional,) this is the golden rule in theology as well as in arithmetic, and makes up the best harmony in a church; not the forced and outward union of cold, and neutral, and inwardly divided minds."

He then gives a vivid description of the state of the nation at his time: a state certainly in some respects very similar to its present state.

"Behold now this vast city: a city of refuge, the mansion-house of liberty, encompassed and surrounded with his protection: the shop of war hath not there more anvils and hammers waking, to fashion out the plates and instruments of armed justice in defence of beleaguered truth, than there be pens and heads there, sitting by their studious lamps, musing, searching, revolving new notions and ideas wherewith to present, as with their homage and their fealty, the approaching reformation: others as fast reading, trying all things, assenting to the force of reason and convincement. What could a man require more from a nation so pliant and so prone to seek after knowledge? What wants there to such a towardly and pregnant soil, but wise and faithful labourers, to make a knowing people, a nation of prophets, of sages, and of worthies? We reckon more than five months yet to harvest; there need not be five weeks, had we but eyes to lift up, the fields are white already. Where there is much desire to learn, there of necessity will be much arguing, much writing, many opinions; for opinion in good men is but knowledge in the making."

Still continuing the same splendid thought, he writes: "Methinks I see in my mind a noble and puissant nation rousing herself like a strong man after sleep, and shaking her invincible locks: methinks I see her as an eagle muing her mighty youth, and kindling her undazzled eye sat the full mid-day beam; purging and unscaling her long abused sight at the fountain itself of heavenly radiance; while the whole noise of timorous and flocking birds, with those also that love the twilight, flutter about, amazed at what she means,

and in their envious gabble would prognosticate a year of sects and schisms."

And concludes that as such was the state of the nation, that they then should allow the people the full benefit of unlicensed discussion.

"The temple of Janus with his two controversal faces might now not unsignificantly be set open. And though all the winds of doctrine were let loose to play upon the earth, so truth be in the field, we do injuriously by licensing and prohibiting to misdoubt her strength. Let her and falsehood grapple; who ever knew truth put to the worse, in a free and open encounter? Her confuting is the best and surest suppressing."

So we may add that the state of the British nation is such as now to be a most favourable time to give full freedom to the discussion of political questions, by the repeal of the stamp duty on newspapers.

The grand difficulty seems to be, that the parties in power are afraid of the consequences of the free discussion of political questions. It was so in Milton's time: he shrewdly remarks, "that when the new light which we beg for shines in upon us, there be who envy and oppose, if it come not first in at *their casements*."

He then makes some concluding remarks on the power of truth, which may form an excellent conclusion on the present occasion.

"What a collusion is this, whenas we are exhorted by the wise man to use diligence, 'to seek for wisdom as for hidden treasures' early and late, that another order shall enjoin us, to know nothing but by statute? When a man hath been labouring the hardest labour in the deep mines of knowledge, hath furnished out his findings in all their equipage, drawn forth his reasons as it were a battle ranged, scattered and defeated all objections in his way, calls out his adversary into the plain, offers him the advantage of wind and sun, if he please, only that he may try the matter by dint of argument; for his opponents then to sculk, to lay ambushments, to keep a narrow bridge of licensing where the challenger should pass, though it be valour enough in soldiership, is but weakness and cowardice in the wars of truth. For who knows not that truth is strong, next to the Almighty; she needs no policies, nor stratagems, nor licensings to make her victorious, those are the shifts and the defences that errour uses against her power: give her but room, and do not bind her when she sleeps, for then she speaks not true, as the old Proteus did, who spake oracles only when he was caught and bound, but then rather she turns herself into all shapes, except her own, and perhaps tunes her voice according to the time, as Micaiah did before Ahab, until she be adjured into her own likeness. Yet is it not impossible that she may have more shapes than one?"

[*Note.*—Having thus concluded this Letter of John Milton, the reader is earnestly entreated to read it over and over again: and the value, the beauty, and the force, will become more apparent every time that it is perused.—Editor.]

CORN LAWS, Essay II.—DISOBEDIENCE AND MISERY. OBEDIENCE AND HAPPINESS.

Influence of Corn Laws on Trade and Manufactures.—Nature of Barter; of Bills of Exchange.—Loss of Markets.—Important Facts.

It cannot be disputed by any one who observes the phenomena of production as exhibited by the Creator in the products of the earth, that the Creator has appointed particular countries for the production of particular articles. Thus opium is obtained from the poppy, which grows naturally in warm countries, such as India; the vine abounds in the south of France; the olive in Italy; the Norway fir in the cold districts about the Baltic; corn in the interior of Europe, in Prussia, in Poland, and in Belgium; and rice in the East Indies.

The law deducible from these facts is, that the *Creator has appointed certain climates and soils for certain purposes:* and the conclusion from this law is, that the general good can be promoted only when each country affords to others, and receives from others, the particular product or products which belong to each. By this method alone can be realized the full amount of benefits which the bountiful hand of Providence has conferred upon man. Another conclusion equally justified by the fact is, that it is absurd for any country, suited for the production of certain natural products, to attempt to produce those products which are more readily produced by another country. And another conclusion also justified by the facts, is, that if any body of men dare to make a law, by which the people of any land are excluded from obtaining from other lands, those products which they can obtain more readily and at much less expence from these lands than from their own, they boldly attempt to insult the Almighty, and to violate the order which He, in his beneficent wisdom, has established.

They, in other words, audaciously make a law, which is a violation of the law of the Creator, and inflict all those sufferings upon others which must necessarily arise from the violation of the Creator's laws.

Men have dared to make such a law, and such is the Corn Law.

In a preceding Number of this Magazine, the *origin* of the Corn Laws; their *authors*, the *landed aristocracy;* and the *object* in view of these authors, their own aggrandizement, were pointed out.

It was shown, in addition, how these laws operated as *a tax upon the community* to the extent of *thirty millions* sterling *annually.* This itself, an evil of no common magnitude, constitutes not one half of the evil inflicted by these laws, on the industrious portions of the over-wrought and over-taxed people of England.

To make this clear, it is proposed to inquire into the effect of

these laws on the TRADE and MANUFACTURES of the country; and, through them, by consequence, on the comfort and the happiness of the people.

All laws, made for the protection of any particular branch of trade, are evils: Those affecting the necessary means of subsistence particularly so. A monopoly of bread, in effect, puts the life of man into the hands of another, and he may either starve him to death or keep him alive, as best suits his own convenience. It is in this way that the people of this country are made to subsist on half provisions, at the will of the landlords. It is true we may be told that wheat in this country is cheap at present, that it is low enough in price, and that all our complaints against the Corn Laws, is only an ebullition of John Bull's natural distemper, namely, grumbling for the sake of grumbling. The question is not, however, whether or not wheat is now cheap enough, though even on this point it is worthy of remark, that, at this moment, the price of Wheat in London is 105 per cent. dearer than in Stettin, and the *duty* levyable upon it, if brought into England, is *thirty-nine shillings and eleven pence per quarter*, while the average price of wheat in London is under 42s. per quarter. Thus the duty chargeable on foreign wheat is nearly equal to its present price in our market.

Our legislators in the enactment of these laws, have stated that they were necessary for the protection of the country, and that, if they were repealed, it would be impossible to raise the amount of taxes requisite to pay the interest of the debt, and to support the expences of government. This mode of reasoning appears very strange, since to us simple people it seemed easier for a man to pay five pounds than to pay seven pounds, and how any thing that operates as *a tax* upon a people should enable them to pay *additional* taxes, is beyond our power to comprehend.

But in what respect are these laws necessary for the protection of the country? We are allowed to suppose that those who make use of this language mean the *trade* of the country, for they speak of us in the same breath as a *commercial* people, and therefore the object is, to ascertain how these laws come to be necessary to the protection of our trade. Let it be noticed here that all trade resolves itself into a *transaction of barter:* it is nothing more than a *simple exchange of commodities*, and is exactly the same between nations as between individuals. No man, in the way of business, gives away any thing without an equivalent in return; but as these exchanges are managed more exactly by the intervention of an article called *money*, it will be necessary, before proceeding farther, to state *what this article is*, and *how* transactions between parties are affected by its intervention.

Money then, which, for the sake of simplicity, we shall assume to be *gold*, is an article possessing no intrinsic value in itself; a man can neither eat it, nor drink it, nor turn it into either an article of clothing or of furniture. These are the things that are necessary to his comfortable subsistence, and if he can obtain all these things in abundance, he will not miss the article of gold, not

though he should never handle a sovereign during his life. But gold is a scarce article, and the *labour spent in procuring it*, to the extent of a sovereign, is equal to that spent in the production of twenty shillings value in any other commodity. On this account gold, or the precious metals as they are called, have become, by the common consent of all civilized nations, the *measure of the value* of all other articles; and the mistaking an article, used only as the *measure of value* in other articles, for an article of *value in itself*, has led to so many errors in the management of our national affairs. It must be noticed here, however, that gold is spoken of in a *two-fold* character; a circumstance that bewilders men's minds, and leads them into the error noticed above.

Thus far gold has been referred to as an article of *currency*, in which capacity it continues permanently the same. Four sovereigns, which make an ounce of gold, are four sovereigns whether gold sell at £3. 17s. 10d. per ounce or at £4. 4s. and they measure the value of other articles as correctly as if the price of gold had never changed. But gold is used also as an *article of commerce*, and, as such, rises and falls in the market in the same way as other articles: the supply and the demand regulate this as exactly, as they do sugar or coffee, or any other article of commerce. Unless this distinction is thoroughly understood, the remainder of this article cannot be understood.

We have already stated that all trade resolves itself into a mere exchange of commodities, and is neither more nor less than transactions in barter. The producer of corn gives as much of what he has produced, beyond the quantity necessary for his own consumption, to the producer of cloth, for as much of this article as he requires, and so on with tea and sugar, and every thing else which he can afford to purchase for the purpose of promoting his comfort. In civilized life this is done apparently in a circuitous manner, which is after all the shortest and the most correct mode of doing it: he takes his corn to the market and sells it for gold; but he wants to purchase cloth, and tea and sugar, and as gold cannot be made to supply the place of either of these articles, he carries his gold to those who have more of them than they need for themselves, and exchanges the gold which he has received for his corn, for as much of each of them as he requires, always taking care that he receives an equivalent for as much as he gives away.

This is a short description of the exchange of commodities between *individuals*. The exchange of commodities between *nations* is similar, save in this, that in the transactions between nations the article of money intervenes seldom, and to a small extent: the transactions are generally settled by bills of exchange, forming another link in the mystery of the iniquitous system of monopoly. A, residing in London, exports to B, residing in Paris, goods to the amount of £20,000; while C, residing also in Paris, ships to D, residing in Liverpool, goods amounting to the same value. Thus, to settle this account, all that is necessary is that B, residing in Paris, should, instead of remitting the amount

to A, pay it over to C, and that D, residing at Liverpool, should pay over his money to A, all which is done through the medium of bankers, without any money passing between the parties. Frequently the route in which these bills travel is more circuitous, but this is the nature of the transaction, and it must be evident to every one that both the parties in England and in France, have received their equivalent for the goods sent.

Every nation is made up of a number of individuals, and the transactions in trade between nations are made up by the transactions of these individuals, and having shown how the transactions between individuals are managed, we cannot fail to understand how it is that the transactions between countries are conducted. From what we have stated it must be evident to every one, who will take the trouble to look seriously at the subject, that no party gives away their property without an equivalent.

It follows, therefore, as a necessary consequence, that no country can export more than it imports, in point of value, without sustaining a loss. We say this without the fear of contradiction, notwithstanding all the flaming declarations which we have had from Mr. Vansittart, now Lord Bexley, and other chancellors of the exchequer, of our exports exceeding our imports by so many millions; and, from this fact, as they were pleased to call it, coming to the extraordinary conclusion, that the balance of trade was greatly in our favour, and that we were great gainers by sending away more than we received.

But what has all this to do with the Corn Laws? In order to see this, we must enquire what are the articles of which we have a superabundance, and what are those in which we are deficient. Now we have stated that wheat is 105 per cent. dearer in London than at Stettin, which clearly demonstrates that the people of London have either too little of this article, or that the people of Stettin have too much, or perhaps both causes may be true; we think we may assume, with perfect safety, that the people of London have too little. In fact, it has been admitted, over and over again, that the *production of food in this country is not equal to the support of its inhabitants;* and it is difficult to see upon what principle we refuse to receive foreign corn, except for the purpose of enabling the landholders of this country to live luxuriously, at the expence of the other classes. They argue, to be sure, that were we to open our ports for the introduction of foreign corn, it would give Prussia and some other countries an advantage over us. They, say these wise men, would be glad to sell us their corn, but they would refuse to buy our cottons, and all the gold would be drained out of the country to pay for this corn, and all our merchants and bankers repeat the cry, and tremble for the loss of their gold. Let us look at the other side of the case. Suppose Prussia were to throw open her ports for the reception of the manufactures of Great Britain, and were to purchase from us freely of all kinds of goods, do these gentlemen suppose that the merchants of Prussia would send us gold in return? No such thing: Prussia has no more of this article than

is necessary for herself; but she has a superabundant supply of other articles that we want, and those we should get: corn stands at the top of the list of these articles, and with all the disadvantages attending it, our merchants would import corn in payment of our manufactures. In point of fact, this has been often done by the manufacturers of Glasgow directly; that is, they have bartered so much muslin for so much corn, at the risk of the corn being permitted to lie, or rather obliged to be kept, in the warehouses till it rots.

The idea of our gold being completely withdrawn is one very well calculated to frighten children, but that men should be alarmed for such a result is perfectly astonishing. As an article of commerce, it will be sold by the merchants of every country to the highest bidder; but, in as far as the countries of Europe are concerned, the whole system of currency is so equally adjusted, that every slight influx of the precious metals into any one of them so affects the exchanges, that the tables are immediately turned, and those who are in want of these metals become the purchasers.

These remarks being made, we are now prepared to understand the effects produced on our trade by the English Corn Laws. Poland, Prussia, and America, are the countries to which the production of corn is the natural and most profitable employment, and all these countries would most gladly have taken the manufactures of this country to an almost incalculable extent; whereas, these are the countries that have made the greatest efforts, particularly Prussia and America, to prevent our manufactures from being received at all. Both of these countries plainly avow that from the Corn Laws of England, their tariffs and prohibitory duties took their rise, for this plain and ample reason, that these two countries are agricultural, and had only the produce of their land to give for the produce of our labour. These two countries have been most indignant at our landowners, and have fostered manufactures of their own in order to be revenged on England. Nothing more strongly marks the folly of the landholders, than the Corn Laws. What, we would ask, would be the value of their lands without the manufacturing population of England? And by these laws they have raised up competitors to our manufactures in various places, at least a century sooner than they would have been erected in the natural course of events, and they have done this through the instrumentality of laws which they cannot much longer retain. If they had been honest and less greedy of gain; in short, if they had acted wisely, they would have thrown the trade open at the end of the war. In this way we should, as we are the greatest consumers of all kinds of agricultural produce, have been the best customers of all agricultural countries, and just because they are agricultural, they would naturally have been the best customers to us.

Almost every man knows something of the advantages derived from the division of labour in a manufactory or on the small scale, and it operates equally beneficially on the large scale. America would have purchased six times the quantity of our manufactures

that she now does, and Prussia in proportion. All this account of trade has been lost to the country by the Corn Laws. Our machinery has been standing often unemployed, and our mechanics half or rather sometimes wholly starving, while the corn growers of Poland and America were in great want of our cloths and cottons, and while their granaries were overloaded with corn.

For twenty years nearly, at any rate for sixteen years, our shipping interest, as it is called, has been petitioning the legislature for protection. So thoroughly engrained are the habits and feelings of the people of this country in the principle and systems of monopoly, that it never occurred to them that free trade would have relieved them. They saw only one side of the question which a change of circumstances had produced, they found that ships could be cheaper built on the continent than in England, but they did not see that the repeal of the Corn Laws would, in a short time, have employed the whole of the shipping of this country. By this single circumstance the shipping interest would have been relieved, and yet not one petition has been presented to parliament by this class for the repeal of the Corn Laws. They have gone hand in hand with the landholders in the oppression of the industrious, hard-working people of England. The ship-owners have, to a certain extent, suffered for their ignorance or their folly, and the day of the landholders is at hand. It is impossible, we think, that the mercantile and manufacturing classes in this country can be hoodwinked much longer. They will speak out soon, and they will speak with effect.

We have now seen that all trade resolves itself into a transaction of barter, and that no nation can continue to import more than it exports, and the reverse of this proposition is equally true,—no nation can export more than it imports. These two things must balance each other. Now, the injury done to our trade by the Corn Laws will be quite apparent. Had we, instead of restricting the importation of corn, thrown our ports open, we should have imported largely, and the necessary consequences of this would have been, an exportation in proportion. And what have we to export? Nothing but the produce of our industry—our manufactured goods. This would have employed our mechanics and manufacturers in making goods for foreigners, and our shipping in carrying them away, and in bringing back the purchases made in return. It would have given profitable employment to all, and full meals to the half-starved and emaciated workmen. They would have consumed a double quantity of food, and our farmers would have had a demand for all their produce, and both they and their labourers would have lived better, only they would have had less rent to pay.

Such are the effects of the Corn Laws. By their enactment and continuance, a certain portion of the manufactures, of which, previously, this country had the undivided possession, is now for ever withdrawn. No circumstance almost in the nature of things can put that portion of manufactures again under the control of England. The only thing that can be done now is to prevent the loss of more,

and for the benefit of the landholders, as well as others, the sooner this is done the better.

The manufacturers have suffered to an incalculable extent in consequence of the establishment of manufactories in other countries, greatly, in the first instance, to the disadvantage of the countries establishing them; but the capital is now engaged, and the manufactories in operation, and what would have prevented their establishment will not now overthrow them. In consequence of this change our ships were kept, for many years, rotting in the harbours, or, if employed, engaged at such freights as would not pay the interest of money laid out in building them; while, but for the enactment of these iniquitous laws, they might have been fully and profitably employed; and the diminution of labour resulting from this destruction of our trade, is still felt through all the ramifications of society, till the pressure has, at last, reached the landlords themselves. We shall see if they are capable of receiving instruction through the medium of their feelings. We already know that there is no possibility of convincing their judgments, or leading them to reason calmly, when they think their interest is concerned.

For a short time they succeeded in keeping up the price of corn, and for a few years longer a great number of the landholders, whose property was under lease, received their rents not wholly out of the produce of the ground, but in part out of the capital of the tenants. This game is now at an end. The farmers, in general, have nothing more to give, and those who have, are become too wise to hand it over to their landlords. And what have the landlords gained by thus squeezing their tenants, and starving the working people? Or rather, what have they saved by it? Nothing. They have raised up a bad feeling in the country against their rapacity, and they have acquired habits of extravagance, which will tell severely on the low rents that are approaching. Had they not enacted those oppressive Corn Laws, the demand, long ere this, for our manufactures, would have so increased the wealth and prosperity of the country, that now the price of corn would have been higher, and better rents obtained by them, than they are again likely to see for half a century. In short, they have pursued the course that will turn out the most injurious to themselves in the end. They have driven from this country for ever a portion of trade, which, if it had been retained, would have rapidly increased the value of their land. Thus it is, that in no way can man offend against the laws of the Creator, without sooner or later suffering the consequences of their offence. By and by they will discover that in this case, as in others, it is "obedience and happiness, and disobedience and misery."

The shipping interest, as it is termed, have abetted the landlords in their system of injustice and oppression. They have suffered in the first instance. It may be added, that the greater proportion of the wealthy manufacturing and mercantile men in the kingdom went along with the landlords, and in the enactment of these restrictive laws, in the hope of each obtaining protection, through

our then existing law-makers, for that which was the procuring cause of their own wealth.

Sir Robert Peel, by his Currency Bill, gave the first death-blow to monopolies, and the system of free-trade will continue to progress, in spite of all the power and wealth of the monopolists. Not that we expect these men to act on the benevolent principle, but the selfishness of others acting against their selfishness, and supported by the growing intelligence of the age, works against them, and they ought to be thankful that it does, for otherwise their power would have been overthrown by violence, and the property which they had abused for the oppression of the people, would have been taken from them.

CORN LAWS. BY EBENEZER ELLIOTT.

" Up, widow, up, and swing the fly,
Or push the grating file!
Our bread is taxed, and rents are high,
That wolves may burst with bile.
Sire of the hopeless! canst thou sleep?
Up, up, and toil for gouls,
Who drink our tears, but never weep,
And, soulless, eat our souls."

" Child, what hast thou with sleep to do?
Awake, and dry thine eyes:
Thy tiny hands must labour too,
Our bread is taxed, arise!
Arise, and toil long hours twice seven,
For pennies two or three;
Thy woes make angels weep in heaven,
But England still is free!"

" Up, weary man of eighty-five,
And toil in hopeless wo!
Our bread is taxed, our rivals thrive,
Our god's will have it so.
Yet God is undethroned on high,
And undethroned will be!
Father of all! hear Thou our cry,
And England *shall* be free!"

" They smite in vain who smite with swords,
And scourge with volleyed fire;
Our weapon is the whip of words,
And truth's all-teaching ire;
The blow it gives, the wound it makes,
Life yet unborn shall see,
And shake it, like a whip of snakes,
At unborn villany."

PHRENOLOGY, BY JOHN EPPS, M. D.

Essay IX.

Having now noticed the principal organs of the moral and religious feelings, the organ which, as it were, flanks these and the higher intellectual powers, namely,

The organ of Ideality,*

will come next under consideration.

In regard to the discovery of this organ, it may be interesting to make the following observations.

Gall had a friend, who had the capability of composing extempore verses on the most unlikely occasions. He was, in every other respect, only of moderate talents. His forehead, immediately above the nose, rose perpendicularly, then retreated and extended itself to a considerable extent laterally, as if a portion of brain had been added on each side.

On observing this form of head, Dr. Gall remembered that he had seen this form in the bust of Ovid, the famous Latin poet.

In other poets, however, he did not find that the forehead rose perpendicularly and then retreated: but in all he found that the protuberances in the anterior lateral parts of the forehead, the situation of this organ, were decidedly evident.

He therefore began to regard these prominences as the distinctive marks of a natural talent for poetry.

Dr. Gall observed this same form in so many other poets, that, at length, he became fully convinced of the existence of a particular power, connected with this particular part of the brain.

But the circumstances which most decidedly influenced him in his decision was, that, on examining a collection of busts of thirty poets, belonging to Mr. Nicolai, of Berlin, he found that the head projected at the site of this organ more or less in all.

One additional circumstance, in connection with this organ is worthy of mention, inasmuch as it will show that this development of the head is dependent upon the *development of the brain.* When Delille died, his head was opened by Drs. Gall and Spurzheim in the presence of several physicians, and the convolutions, placed under the external prominence of this part, projected beyond all the others: a fact, highly satisfactory in connection with the phrenological doctrine, that the brain gives form to the skull.

At a numerous assemblage, an individual was pointed out to Dr. Gall, as a subject for remark. Dr. Gall at once observed that the organ of poetry, as Dr. G. now called this organ, was extremely

---

* Marked No. 16.

developed. This individual was the famous poet, François, generally named Cordonnier, he having been bred a shoemaker.

But not only in living poets, but in the busts of those who threw, ages since, the bright beams of poetic power over this world's dark scene, this organ is found developed: a fact, which must lead to this conclusion, that sculptors either accurately represented the individuals, or had observed that poets had a particular form of head, and gave this form to the poets whom they represented.

The bust of Homer has this organ largely developed.

In the busts of Sir Walter Scott and of Lord Byron, this organ is developed: so in Wordsworth, and in many other poets, who might be named; and whose names are strung on the bead-roll of time: some as instances of talent, combined with depravity: others, as instances of talent, enlisted on the side of every thing that is lovely and glorious.

Dr. Gall, as has been stated, called this the organ of poetry. Dr. Spurzheim showed the inaccuracy of this term, by demonstrating that poetry, in its production, requires the activity of several powers, which, by themselves, do not, by their activity, form the grand constituent of poetry; but produce only accidental circumstances: which, however, though accidental, are required in a greater or less degree, to produce what is generally designated *poetry*.

Still, as all poets have this organ, it is evident that there must be some connection between it and poetry. The nature of this connection will be discovered, when the grand, the essential constituent of poetry is made known. What then is this grand essential constituent? Dr. Spurzheim analyzed the subject, and pointed out, that, in every kind of poetry, the sentiments are exalted, the expressions warm, and that there must be rapture and inspiration. "In poetry," Dr. Thomas Brown remarks, "we perceive everywhere what Akenside calls

> "The charm,
> That searchless Nature o'er the sense of men
> Diffuses,—to behold, in lifeless things,
> The inexpressive semblance of himself,
> Of thought and passion :"

The zephyrs laugh,—the sky smiles,—the forest frowns,—the storm and the surge contend together,—the solitary place, not merely blossoms like the rose, but it is glad."—*p.* 223. *Philosophy of the Human Mind.*

The most beautiful description of what poetry is, is to be found in the following extract from an article in Tait's Magazine, on the Radical Poets of Britain.

"'What is poetry?' has often been asked. To this question, Lord Bacon, a true poet, though he wrote in prose, replies,—'It is something divine; because it raises the mind, and hurries it into sublimity, by conforming the shows of things to the desires of the soul; instead of subjecting the soul to external things, as reason

and history do.' What is poetry? we ask of Hazlitt, another of the poets, who submitted neither to the links of rhyme, nor to the more majestic bondage of blank verse; and he poetically replies,—'Poetry is that fine particle within us that expands, rarifies, refines, raises our whole being,—without it man's life is poor as a beast's;' and he eloquently illustrates the definition,—'The child is a poet, in fact, when he first plays at hide and seek, or repeats the tale of Jack the Giant-Killer; the shepherd lad is a poet, when he first crowns his mistress with a garland of flowers; the countryman when he gazes after the Lord-Mayor's Show; the miser, when he hugs his gold; the courtier, when he builds his hope upon a smile; the savage, when he paints his idol with blood; the slave who worships a tyrant, and the tyrant who fancies himself a God; the vain, the ambitious, the proud, the choleric man; the hero and the coward, the beggar and the king, the rich and the poor, the young and the old, all live in a world of their own making; and the poet does no more than describe what all others think and act.' These are subtle and exalted descriptions of poetry,—passionate and imaginative poetry; but they are not complete. What is poetry? we inquire of Ebenezer Elliott, a radical poet, and he forcibly and briefly answers,—'WHAT IS POETRY BUT IMPASSIONED TRUTH?'"

This something, then, which exists in all poetry, must have a name. Dr. Spurzheim gave it a name,—IDEALITY.

In the existence of this organ, an interesting evidence is given of the old truth, "Poeta nascitur non fit:" a truth, which he who promulgated it, little thought would be demonstrated by a physical demonstration.

From the views above recorded, it is clear that ideality may exist where poetic rhythmical productions are not made evident: but it is equally clear that the state of mind which exists in the poet must exist in all individuals who have this organ.

Hence it is that we find many can appreciate, who cannot write, poetry. They can rejoice in splendid sentiments; and they can feel the force of poetic embellishments, though not able to put the embellishments on the productions of their own mind according to the rules of poetic vestiture.

Dr. Chalmers has a very large organ of ideality, and who that has read his sermons on astronomy, can avoid acknowledging that in him poetry exists? Who that has read some of his fine speeches, but will acknowledge that his is a poetic mind of the highest order.*

Persons, endowed with this, clothe, when but moderately excited, their sentiments in the splendour of eloquence and poetic feeling: hence there is a degree of brilliancy sometimes exhibited by such individuals, so great as to astonish those who are not acquainted

---

* In the next number a speech of Dr Chalmers, on Catholic Emancipation, will be published, as containing some of the noblest sentiments that perhaps were ever delivered; and, in connexion with this, some extracts from speeches the same talented man has lately made, showing how the mighty man has fallen since the gewgaws and the dignities of official station have blinded his eyes.

with the nature of cerebral organization: and hence it is, that during a speech, from the excitation produced, thoughts that breathe and words that burn arise and roll forth with a power that the speaker himself did not deem himself capable of realizing.

The existence of this organ is one grand means of polishing the character. Take two individuals in the less opulent ranks of society. Both are left, quite unexpectedly, large fortunes. They seek an alteration of their situation in life: they both purchase a country-seat, carriages, horses, servants, and other et ceteras. The one has large ideality, the other is deficient. The former gradually acquires a polish suited to the society with which his new situation has brought him into contact. The latter does not receive any polish: he still retains the roughness of manners and the vulgarity of mind which he had before: his money cannot make up the want: he is cast off by the society to which his money enabled him to approach, and feeling disappointed and disgusted at the ill-treatment he imagines he has experienced, seeks, at some neighbouring public-house, society more congenial to his wishes; and, at last, often by the extravagance thus induced, passes back to the condition in life from which he had been temporarily raised by means of his gold.

Ideality in the one case, and a want of ideality in the other, constituted a principal cause in the difference of results.

In the heads of murderers this organ is generally found deficient: and men of a degraded and grovelling character have a similar deficiency.

It seems to lead its possessors to aim at perfection: and this aiming at perfection may take almost an infinity of directions. It may act in a shoe-maker in making him to seek to give an exquisite finish to the shoe he forms. It may impart to the chisel a power of giving a touch, like that of Phidias, to the marble. It may even clothe drapery in all the beauties of Græcian elegance: and finally, it serves to elevate the mind above the mere grossness of vegetative existence.

To the Editor of the Anthropological Magazine.

Sir,—It seems to me that, by advocating the science of phrenology, you have given to the study of mental phenomena a clearness of apprehension, and a capability of analysis, which the *science of the human mind* has not hitherto possessed. I have certainly been enabled by *your illustrations*, to trace out, and to ascertain, in several instances, motives for human actions, which, to me, were previously inexplicable.

But whilst I thus far acknowledge my obligations, to this system of organology, I both observe in others, and am sensible myself of *certain feelings* which I am unable to trace to their source. One of these is the retrospective emotion of *gratitude*; an emotion in some individuals powerfully vivid, in others scarcely ever mani-

fested, yet, at the same time, the latter individuals are, perhaps, as sensible as the former to all the tender emotions that arise from bonds of affinity and relationship. Whence, then, originates this most delightful, most elevating, of all emotions? An explanation will oblige,

Your obedient Servant,

April 13, 1836. A SUBSCRIBER.

[*Note.*—At some future occasion, this and several other feelings will be examined and explained phrenologically.—EDIT.]

ON THE UTILITY AND THE ADVANTAGES OF GYMNASTIC EXERCISES.

If the following observations on the utility and the advantages of gymnastic exercises appear more enthusiastic than the theme deserves, the essayist hopes that this enthusiasm will be ascribed to a conviction arising from personal experience, both in regard to himself and others, of the benefits arising from a judicious practice of them. Objections, and serious ones too, have been raised; and prejudices, deep-rooted prejudices, entertained against gymnastics; and these are still maintained, because the individuals are ignorant of the real causes which, in the first instance, gave just ground for their assertion. If it is of any consequence to realize the oft quoted phrase, of "mens sana in corpore sano," then are gymnastics one of the best and most efficient agents. If the correction of any accidental malformation of the body or limbs, or the greater expansion of the chest, so that the *lungs*, those grand aerators of the vital stream, be a desirable good, then are gymnastic exercises excellent as the means. But should nature have performed her part, is it nothing to have a frame well built up and firmly knit together? Is it nothing to have elasticity of muscle and activity of body, so that when called upon by any sudden emergency to endure more bodily fatigue than ordinary, we may not only be able to go through the task without flinching or sinking, but when the stimulus for exertion is past, and the body and the mind become quiescent, we may feel nothing but what a few hours repose may entirely remove? To say nothing of the exhilirating influence which they have on the animal spirits, creating not only an appetite for food, but strengthening the digestive organs so as to meet the increased demand. The inducements to early rising are not the least of the many benefits derived, and who but the sickly and the dronish, the indolent and the sluggard, will deny that it is delightful "to scent the morning air,"—"to doff our cap and bid good morrow to the sun,"—a ceremony performed by few, comparatively speaking, in this huge forest of bricks and mortar. But how, it will be asked, is it that gymnastics, with all these advantages, have not been more generally practised? The answer is simple, for the very

same reason that education has not been more generally diffused over this country; namely, that the people have not been made sufficiently alive to the importance of it. And it is the essayist's hope that, whatever system of general education may be adopted, "the physical training and strengthening of the limbs and bodies of those who are destined eventually to become the sinews of our country, will form a prominent feature. So true is it that the mind sympathises with the body, that we ought not to wonder at the peevish expressions and nervous emotions of those who are continually assailed by debility or disease.

But as it is a truth that every acquirement is selfish, and but of little value, which rests only with the individual who possesses it, and which does not directly or indirectly tend to the benefit, and consequently to the general happiness of mankind, so would gymnastics deserve little of our esteem, and would merely level us to the rank of mountebanks and tumblers, were they not capable of administering, on many occasions, to the wants, necessities, and protection of our fellow creatures. And this is the high and benevolent feeling to be engrafted on the hearts and minds of mankind, and not the desire of becoming athletæ or gladiators; in other words, the ambition of exhibiting themselves as boxers, or promoting quarrels for the sake of displaying their newly-acquired strength.

How many persons might have been saved in times of shipwreck, had they attained a power of grasping a rope more firmly, and sustaining the weight of their bodies for a definite period, till assistance came; but which now, alas! in most instances comes too late. The writer never sees the engraving, (familiar no doubt to many readers,) of a sailor, suspended by one arm to a rope, and holding in the other a female and her child, having snatched them from a watery grave, but immediately arise the alternate emotions of admiration and regret,—of admiration, at the bold and generous effort, dictated by courage and strength combined; and regret, that hundreds are lost, not from the want of desire, but from the conscious inability to save, through the want of muscular strength, on the part of beholders.

Many might save themselves from the dreadful ravages of fire, if they had acquired sufficient strength to hang by a balcony, or by the sill of a window, till a ladder could be brought and placed under their feet, or a blanket held under for them to drop into. These instances alone are sufficient to prove that the gymnasium is capable of producing a large amount of general, as well as individual good; and, in the next essay, the two principal objections, which have been started, even by medical men, against the exercises, will be examined; and an attempt made to show, that, a judicious course of *preliminary* exercises would fit the body and muscles to undergo the severer exercises of the horizontal pole, parallel bars, or wooden horse, such as were used at the London Gymnasium. Nay, that, without these, the health and spirits may be greatly increased; and, unless dissipation or unforeseen accidents ensue, a lasting benefit enjoyed.

The Human Body. Essay VIII.—*The Human Skin.*

In the Essays on the human body in the preceding Numbers, the various duties, performed by the various parts of the *intestinal canal* and by the *muscles*, were explained. In this Essay, the *human skin*, that beautiful investiture that covers all the other parts, and serves several important uses, will be examined.

The skin has a very extensive range, covering all the external and some of the internal parts of the body.

It is composed of *three* layers, which are separable by maceration in water.

The outermost layer or coat is called the *cuticle*, also the *epidermis*, and by some the *scarf skin*.

This covers the whole of the body, and all those internal parts which might be injured from exposure to the air; (such are the passages through which the air passes in respiration, the whole of the alimentary canal, the tongue, the inside of the cheeks, the fauces.)

It may be asked, Why should *this* be chosen to cover these parts?

The reason is, that the cuticle is to be regarded as almost dead, being endowed with very little vitality, and hence not liable to be acted on injuriously by agents that would so act upon parts not protected by this dead covering. This membrane, therefore, resists destructive agents. The extent of injurious agency which it will bear is seen in the fact, that persons' hands engaged in the domestic process of washing, do suffer but little, compared with the length of time that they are immersed in heated water.

But even when this is destroyed, the Creator has provided that it shall soon be *reproduced, more speedily than any other part of the body;* thus obviating the inconveniences that might otherwise have resulted from the defence derived from this covering membrane being taken away.

This cuticle is so constructed as to allow a ready passage to various agents, although of the holes which have been described, as existing in it, the existence has not been established.

To show the importance of this cuticle the fact may be referred to that it is found not only in the *animal* but also in the *vegetable* existences: plants being covered with this, as may be seen very clearly in the branches of the currant tree, from which it may be seen peeling off.

Immediately beneath this is the second covering or layer, or coat, called the *mucous net*, or *rete mucosum*. This was discovered by an anatomist of the name of Malpighi; and hence it often goes by his name.

It is on this that the *colour* of the being is dependant.

And on account of its difference in colour in different races, Blumenbach, the celebrated physiologist, divides the human race into five varieties: the first, the Caucasian, embracing Europeans, the western Asiatics, and the northern Africans, in which it is *white:* the second, the Mongolian, including the rest of the

Asiatics, the Finnish races of the north of Europe, and the Esquimaux, in which it is *yellow*, or resembling *box-wood*: the third, the Ethiopian, in which it is *tawny*, or *jet black*: the fourth, the American, comprehending all Americans, except the Esquimaux, in which it is *copper-coloured*: and the fifth, the Malaic, including the inhabitants of all the islands in the Pacific Ocean, and of the Philippine and Sunda, and those of the peninsula of Malaga, in which it is *more or less brown*.

The remaining, the third layer, is the *true skin*, the *cutis vera*, called also the *corium*. This is situated under the rete mucosum, just described.

This is very tough, capable of extension, closely interwoven with the parts above and below it.

It moreover is thicker in different parts, and this difference is found always to be connected with use: thus, this skin at the palms of the hands and the soles of the feet, is much thicker than it is at any other part: and this additional thickness is found *at birth*, demonstrating the wisdom of the Creator, and at the same time overturning the atheistical dogma, that every wise provision is not the result of the operation of a designing mind, but merely the effect of circumstances inducing a necessity, to meet which, the change, constituting the provision, is brought about.

This true skin is most abundantly supplied with nerves and with blood vessels: and hence originates the great sensibility of this part of the body.

To render this sensibility more perfect, the internal surface of this true skin has a cellular texture; and it is through the cells constituting this texture that the blood vessels and the nerves pass to be spread out on the outer surface of this skin, terminating by small points, called papillæ, easily observable upon the tongue, also upon the fingers: indeed where sensation and touch are needed most there these are most abundant.

From the great abundance of vessels, a state, generally described under the title of *vascularity*, it happens that, upon the slightest injury to the true skin, blood appears.

Besides these vessels in the skin, there exists another class of vessels called *absorbents*, which perform some important functions in reference to health.

Besides these, a number of glandular bodies, called *sebaceous follicles*, because they secrete an oil which is spread over the skin.

In addition to these parts, another production connected with the true skin, is worthy of notice. It is the *hair*.

The hairs arise from the inner surface of the true skin. Each hair has a *bulb*, called its *root*: and is always anointed with an oily halitus. Different parts of the body have more or less hair, and the hair in all parts is arranged in a particular direction, for the protection of the parts themselves. Where much friction is applied, there the Creator has introduced a cushion of hair.

Such then are the parts connected with the human skin: the

epidermis; the rete mucosum; the cutis vera; nerves, blood-vessels, absorbents, sebaceous follicles and hairs.

This description of the various parts constituting the human skin, may be concluded with a notice of one of the uses to which this important part of the human machine is constantly being applied.

Man may be regarded as a generator of poison: that is, he emits those ingredients, which, are deleterious to himself, if retained, and destructive to others, if received. The skin is one part of the body through which these deleterious ingredients escape.

These ingredients escape under the form of *perspirable matter* from the skin; the process itself being called *perspiration.*

This perspirable matter consists of water; of the acid forming the basis of vinegar, called the acetic, of the muriate of soda and potash, and some carbonic acid.

This perspirable matter varies in *quantity* and in *quality.*

To ascertain the quantity, M. Seguin shut himself up in a bag of glazed taffetas, which was tied over his head and provided with a hole, the edges of which were glued to his lips with a mixture of turpentine and pitch, so that the pulmonary exhalation might be thrown outwards, and the cutaneous alone be retained in the bag, He first weighed himself and the bag in a very nice balance, at the beginning of the experiment; then at the end of it, when it had become lighter in proportion to the quantity of exhalation thrown out by the breathing; and, lastly, he weighed himself out of the bag, to ascertain how much weight he had lost in all; and by subtracting the loss occasioned by the lungs, the remainder of course exhibited the amount carried off by the skin. He attended minutely also to the collateral circumstances of diet, temperature, &c.; and allowance being made for these, the results at which he arrived were the following:—

The *largest* quantity of insensible perspiration from the lungs and skin together, amounted to thirty-two grains per minute; three ounces and a quarter per hour; or five pounds per day. Of this the cutaneous constituted two-thirds, or sixty ounces in twenty-four hours. The *smallest* quantity observed, amounted to eleven grains per minute, or one pound eleven and a half ounces in twenty-four hours, of which the skin furnished about twenty ounces. The *medium* or average amount was eighteen grains a minute, of which eleven were from the skin, making in twenty-four hours about *thirty-three ounces.* When the extent of surface which the skin presents is considered, these results do not seem extravagant. Indeed, the cutaneous exhalation is more abundant than the united exertions of both bowels and kidneys; and that, according as the weather becomes warmer or colder, the skin and kidneys alternate in the proportions of work which they severally perform; most passing off by the skin in warm weather, and by the kidneys in cold, and *vice versa.*

This subject will be, in its practical application, proceeded with in the next Number.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

JUNE 1, 1836.

DROWNING-AT-SEA SOCIETY.—OBEDIENCE AND HAPPINESS. DISOBEDIENCE AND MISERY.

In several preceding Numbers the existence of a drowning-at-sea society in Great Britain was established. It was shown that this society grew rich by the sinking of ships; and that, in order to make ships sink, that the ship-builders are obliged to build these vessels so that, on striking, they will readily go to pieces. It was shown that, in vessels below 500 tons burden, nothing more than a plank $2\frac{1}{2}$ inches thick excludes the water; and above 500 tons, a plank *three inches* * thick. It was shown, that, from this, and other features in the construction of a ship, very trifling injuries must occasion the destruction of the vessel, and consequently the loss of the lives of the passengers and of the crew. It was shown further that if ship-owners used stronger ships, that they would be ruined men, on account of a system of marine insurance, in which ships however strong, after a given time, are placed out of the first in a second class; for the insurance of goods, sent in which, a larger premium is required than in the same ship when it was in the first class: the change of the ship from the first into the second class, being determined virtually by *age* and not by *strength*. It was further shown that the government obtains very considerable revenue from this *ship-sinking* system, and that, therefore, to expect any aid from them is vain. It was further shown that ships can be built so strong that they could not sink, except from absolute neglect or from positive ignorance of those navigating; and the question occurred, *why should not the safety thence arising be insured to the public?* The answer is, that though it is the interest of the public that such protection should be afforded, it is the interest of others that such protection should not. But why does not the public demand that such protection shall be given? Because they are ignorant of the state in which ships are: they know not sufficiently the horrors of the system under which they navigate the deep. To make them aware, and

* As a painful verification of the above remarks, an American trading vessel, on board of which were nearly 300 passengers, emigrants, who had lately sailed out of the port of Liverpool, bound for the United States of America, called the *Charles*, foundered in the night, owing to the *starting of a plank*, and out of the whole number only 12 or 14 individuals escaped in a small boat.—*True Sun*, May 13, 1836.

to keep alive the feeling, we introduce the following remarks on shipwrecks, by our valued correspondent, Mr. Ballingall, of Kirkaldy :—

SHIPWRECKS.

"The times have arrived when every institution of the country is fated to undergo the most searching scrutiny, and when monopolies and societies injurious to the general welfare, must be swept away, however they may heretofore have been enveloped in mystery, fostered by inveterate prejudice, or upheld by power. Amongst institutions of this description, which have lately been exposed to public view in treatises, reviews, magazines, pamphlets, journals, the daily press, and petitions to parliament, is that of Lloyd's. Although the effects of this institution are to be condemned, we do not mean to reflect on the members composing it individually. Wherever money is to be gotten mankind will assemble, exactly as armies and navies are provided with men, who never trouble their heads for a moment about the cause in which they are engaged. From the exposures which have lately been made, it can no longer be concealed that Lloyd's flourishes, as an institution, by the wreck of ships, and the waste and destruction of merchandize in the sea. It is certain also, that effective measures are taken to insure wrecks and waste of property taking place; and, in short, it is clearly demonstrated, not only that were there no wrecks, there would be no sea insurances, but that increased losses of vessels and goods at sea, as it is the means by which underwriters derive their living, however incredible it may at first sight appear, is the underwriters great aim. This arises from the fact that underwriters, although apparently the insurers, are not so in reality, since they have previously derived the means of paying for any losses which may take place from the merchant and shipowner, who again charge it to the public in the freight and charges of conveyance of merchandize, and thus the public, and not the underwriters, as is generally supposed, are the real *insurers*. It is further demonstrated, that the greater the number of wrecks and waste of property, as a matter of course, the higher the premiums of insurance rise, and the better for the underwriters, and that human life is recklessly sacrificed to this system, to an appalling and incredible extent. But it is clearly impossible that such an institution can continue to exist, on the present plan, after public attention has been successfully directed to it. So long, indeed, as it was enveloped in mystery, it might continue to flourish; but the exposures which have lately been made and are still making, and above all, the strong and striking contrast, proved to exist, in the safety of our ships of war, a safety clearly traceable to their superior construction alone, over our merchant ships, proves the mischief arising from such an institution, and it will be in vain to attempt to defend it by any appeals to the wisdom of antiquity, or by denouncements of the dangers of innovation.

We regret to add, that there has been an indisposition, on the part of government, to forward enquiries on this momentous subject, and a periodical expressly devoted to maritime subjects, and ably conducted, states that the most influential prints of the day,

have shrunk from a discussion of the principles of marine insurance as now conducted. Yet, against every opposition from whatever cause proceeding, so strong is truth, that a conviction is gradually forcing itself on all classes of society, that a monstrous abuse exists, and which must speedily be reformed. The many and powerful interests, however, deeply interested in the present system, and which have, in the course of years, grown with its growth and strengthened with its strength, will make the reform a work of difficulty. Publicity is unfortunately effected with difficulty, and not without expence, and the public, the party really interested in the matter, are in complete ignorance of the practices. Ship building, wherein we consider nearly the whole evil to lie, is an art almost totally unknown to the public, and in which, unfortunately, it considers itself to have little or no interest, thinking that safe ships must be an object to ship-owners, and that they (ship-owners) will insist on ship-builders making them safe, and not seeing the case in its true light, that the cheaper a ship-owner can get a ship, the less is the interest of capital he expends, and the less insurance he has to pay, in proportion to the cheapness: and that, as he keeps his vessel fully insured, and in general the freight also, he does not care a straw about safety, or whether his vessel be lost or not. This is the real state of the case, and as the merchant can cover, not only the value of his goods but also a profit on them, by insurance, he is in much the same situation as the ship-owner: while to the ship-builder the loss of every vessel is clearly a demand for him to build another, and the whole loss of vessel and merchandize must, in spite of all pretences to the contrary, fall on the consumer, or in other words the public. But the numerous wrecks of merchant vessels, and drownings consequent thereon, more particularly of emigrants and convicts of late, is awakening the public from its lethargy, and the safety of vessels of war in similar circumstances, has become undisproveable. The *Pique* frigate, *Racer* brig, and *Lightning* steamer, are strong proofs of this, when compared with the *Amphitrite*, *George the Third*, and *Neva* convict ships, to say nothing of the scores of emigrant and timber laden ships lost every season, with the emigrants, crews, and contents. When too it is considered, that whilst every other art and science has been rapidly improving and attaining to perfection in Britain, and ship-building, in the royal dock yards, has been keeping pace with these improvements, merchant ship-building has positively been retrograding, and that this fact is proved by the circumstance of shipwrecks having been greater *per cent.* of all merchant vessels, of late years, than they were at the beginning of this century, not a doubt can exist that merchant shipping lies under some incubus, or is under some malignant influence, to which other things are not subjected. Where this influence does not exist, as in the case of the royal navy, safe vessels are built, which are seldom lost even in the most exposed situations. The test of the use of an engine is the working of the machinery, and as by the present system of classification of merchant shipping, all motive is taken from a ship-owner to have a strong, safe, and durable ship, so none are built.

If a law were passed that all carts should become unprofitable to the owners at eight, ten, or twelve years old, none would be made to last longer than these periods. The parallel holds exactly with merchant shipping, and this practice, together with the incompetency of the masters and mates, are the real causes of the vast majority of shipwrecks. Both these reforms, however, will be strenuously opposed by underwriters, together with all measures tending to a diminution of wrecks. Our limits will not admit of entering further on this subject at present, and we may give a few facts in a future Number; meanwhile, able articles on the subject will be found in the *Edinburgh* and *Westminster Reviews*, the *Nautical*, *Mechanics*, *Metropolitan*, and *Tait's Magazines*, *The United Service Journal*, *The Christian Physician*, *The Spectator*, *Examiner*, and *Atlas*, and a host of newspapers. We live in strange times, and we have heard of lectures being about to be given on the subject to the inhabitants of large towns, and I believe something of the kind is already commenced in London. We feel convinced that, the impulse once given it will go on increasing, until the object so much to be desired, as it affects the safety of human life, and the national property, shall be fully accomplished. We wish it God speed."

This communication will have its due weight upon the minds of all: it will show that any violation of the law of the Creator leads to many other violations: it shows what miseries result, when men do not do to others what they would that others should do unto them: and it shows the duty of every individual who wishes to prevent *widows being untimely made and children untimely orphanized*, to petition parliament to institute an inquiry into the evil.

To the facts already referred to it is our painful duty to add, that such is the love of money and the deadening influence upon the minds of ship-owners, such is the unconcernedness of ship-owners for the lives of their men and the passengers in their ships, that actually they deprive of their bread those captains who, under stress of weather, put their ships into a port for which harbour dues are to be paid, thus touching the pocket of the ship-owner: *it being a well known custom with many ship-owners of the east coast, (particularly with those belonging to the port of Sunderland,) to discharge or throw out of bread the masters of vessels, if, on their arrival in port, they are found to have incurred the expence of harbour dues for refuge at any port on their passage.**

Reader, mark this. What is this but threatening a man, drowning in deep waters, that if he attempts to come to shore he will be shot. And yet these ship-owners go down on their knees and pray to God to bless the widow and the fatherless, and to protect them that go down to the sea in ships.

---

* "That such cargoes as may be landed at this port from ships which put in from damage at sea, and which shall subsequently be re-shipped, shall be free of wharfage and other dues."—This forms a pleasing addition to the statements above; and is the resolution, be it ever remembered, of the *Reformed* Town Council of Portsmouth, May 1836, and does credit to them.

PHRENOLOGY, BY JOHN EPPS, M. D.

Essay X.

In this Essay, that class of faculties known under the name of the Animal Feelings, will be considered. Their organs are situated at the back and the inferior parts of the side of the head.

This situation would at once demonstrate their inferiority to the moral feelings and intellectual powers: at the same time declaring their essential use in enabling man to preserve his existence as a being. This situation will further declare that these faculties are powerful in giving *impulses* to act: impulses, however, not to be manifested in act till approved by the moral feelings, and guided by the intellectual powers; so that man must be led to the conclusion, that the order adopted by nature, is that *impulses* should spring from the animal: these impulses should be tested by the moral, and being there as it were sublimed and purified, be directed by the intellectual, and then descend into the eyes, voice, and hands, and other members of the body, thus obtaining expression.

The first organ to be noticed is that of Self Esteem.*

The discovery of this organ was singular.

Dr. Gall met with a beggar, of a very singular character, at a time when he was engaged in an inquiry into the causes of mendicity. He thought that mendicity was dependent upon want of foresight, which the form of the head of this singular beggar seemed to justify; for, in the situation of that organ, which is large in all noted for circumspection, his head was very narrow.

Gall moulded the head of this man, and found, at the upper and hinder part of the median line, a protuberance, which, he was convinced, must be dependent upon the development of the brain at this part. Before this, he had never observed this development. He examined minutely into the man's character and disposition, and found, to his great astonishment, that the cause why he had adopted the life of a mendicant, was, that he was too proud to work. Though Dr. Gall had a difficulty to conceive how pride should not make him ashamed to beg, he determined to investigate his statement in relation to this organization.

After this he met with a prince at Vienna, who made himself remarkable by his ridiculous pride, by his stiff walk, and by the habit of referring, on every occasion, to his ancestors. He happened to be bald, and Dr. Gall observed, that, in him was the same organization as that which he had noticed in the mendicant.

He began now to think that pride might be a fundamental quality of the mind, dependent upon a particular organ of the brain.

---

* Marked No. 10.

A physician lived at Vienna, who, at consultations, would always go in and come out first, would always sign his name first, and exhibited other indications of pride. Dr. Gall found in his head this organ developed.

In a young woman, aged 18, at Heidelberg, this organ was found large. This girl appealed to the Deity on the most trivial occasions: she carried her head raised and thrown back; and, though the daughter of a fruitseller, spoke her language with peculiar purity, and sought the acquaintance of those only who ranked above her.

In establishments for the insane, numberless instances of diseases of this organ may be met with. How many imagine themselves to be kings, emperors, generals. Pinel relates the case of an insane individual who regarded all other men as particles of dust. He records the following curious circumstance connected with insanity as arising from this faculty: "Three madmen who believed themselves to be sovereigns, and who individually took the title of Louis the XIVth. were disputing respecting the royal rights with very great vehemence. The attendant, seeing them, went up, and drawing one aside, observed with a serious look, "Wherefore do you enter into dispute with those people, who are clearly mad? Is it not known that you alone ought to be acknowledged for Louis the XIVth?" Flattered with this homage, he retired immediately, regarding the others with a disdainful look.

The natural language of this organ seems to be the throwing the head backwards, at the same time holding it erect.

It is exhibited very early in life. Children in their games choose different offices. One will be a king; one a general; one an emperor; and other children submit readily to the despotism of these little despots.

It is related that the pilgrims, on their return from their visit to the tomb of the prophet, Mahomet, at Mecca, carry their heads uplifted, very different from the attitude assumed previously to their arrival.

The legitimate function of this faculty is to give a sense of dignity; a feeling of self confidence; a power of being contented with one's self.

It is blind, however, in its activity. It does not teach whether the individual is justified in the conception he forms of his dignity, or whether his self confidence is well grounded.

It is very useful to the patriot. It must have been large in a Wilberforce, a Granville Sharpe, an Oberlin, a Howard, men who have persevered in the pursuit of what was good under difficulties the most numerous and oppressively great.

It is essential to the advocate of any new scientific, religious, or political view; and viewed in relation to these uses, how beautifully appropriate does its situation, behind the organ of firmness, appear.

It leads to the use of the word I. Cobbett had it large; and in his writings this personal pronoun stands very prominent.

According to its direction, it may lead to very absurd manifestations of pride.

Thus, the pride of ancestry affords very commonly exhibitions of the absurdities arising from the activity of this faculty.

It is the foundation both of the aristocratic and the democratic feeling: *aristocracy being the self esteem in the* FEW, *democracy the self esteem in the* MANY.

The true aristocrat believes that all men are made for him: there is very little doubt that many believe that some men were made upon purpose to work for them: just in the same manner that our forefathers believed that the sun was made for our earth, and actually had the trouble of going daily its journey around our little planet.

The circumstances in which the nobles of the earth are placed afford great palliation of their erroneous views, when they talk of their rights in reference to game, which they embody in those abominable laws, called the *game laws;* of their rights in reference to the taxing other people to support their creed, under the form of a church establishment: such self-complacent talking is to be referred, in a great measure, to their education and their organization combined, both which have a strong tendency to develop their self esteem.

And, as a curious recognition of the power of these feelings as dependent upon self esteem, the fact is worthy of notice that the members of the House of Lords are bound by their *honour*, and not by the taking of an *oath*.

This organ, when large, produces the *love of rule;* and therefore when this is largely developed in the many, the democratic feeling is created: because feeling a love of rule, they feel a dislike to be ruled except by themselves. And, wherever this is the case, the *representative* form of government is sure to be adopted: in other words, that form of government in which a man rules himself by the medium of his representative: hence, also, the explanation of the fact, that the representative form of government has so strong a hold among the British; self esteem being generally well developed in the head of Britons; as is evidenced in manifestation by the well known expressive phrase, John Bullism, a name for gross rudeness, founded upon large self esteem.

This feeling is a indirect constituent in the love of liberty: though it does not of itself produce that love of liberty, which consists in extending such an amount of freedom to think and to act to others as is compatible with the same amount to ourselves. For, it is to be lamented, that the most *noisy sticklers for liberty, out of doors, are the greatest tyrants at home;* a fact, easily explained by the existence of a large organ of self esteem, without a corresponding size of conscientiousness and benevolence.

It must have been large in those who signed the American declaration of independence; and Mr. Lance, who had profiles of many who signed that celebrated declaration, stated to the Essayist, that the organ is represented large. It is pleasing to look at the clearly written names of these men as signed to this declaration: a clear-

ness showing that they felt the dignity of men in signing the same. As an indication of the existence of this organ largely developed in the American head, the circumstance is worthy of notice, that servants are not called *servants* but *helps*.

This organ being large in the British, makes them feel indignant when any aristocratic lordling talks of taking care of the people in spite of themselves. Such assertions give great offence, because self esteem, exhibited actively in such assertions, offends self esteem in others.

This organ being large and not enlightened by the intellect, gives persons erroneous opinions of themselves. It made the fly who sat upon the revolving chariot wheel cry out, when the dust was caused by the revolving of the wheel, "lo! what a mighty dust am I raising:" and it makes many human flies imagine themselves to be the causes of events, with which their actions have scarcely the remotest connection.

Its legitimate, its exalted activity is, when it acts with the desire of making a man seek to get the rule over his other animal feelings. When it makes him to scorn to do a dishonourable, an unjust, an unkind act: when it persuades him to adhere to a truth which acknowledges no one besides himself as its friend.

Its legitimate use is, when it acts on the mind of him who professes to be a disciple of Him who taught, whatsoever ye would that men should do unto you, do ye also unto them, so as to make him avoid the doing anything disgracing his character as a christian. In other words, its legitimate use is to induce the individual to ask, as Paul did the Corinthians, "Know ye not that ye are the temple of God, and that the Spirit of God dwelleth in you. If any man defile the temple of God, him shall God destroy, for the temple of God is holy, which temple are ye." 1 Cor. chap. iii. 16, 17. And again in the following phrenological passages, "Be ye not unequally yoked with unbelievers: for what fellowship hath righteousness with unrighteousness? And what communion hath light with darkness? And what concord hath Christ with Belial? Or what part hath he that believeth with an infidel? And what agreement hath the temple of God with idols? For ye are the temples of the living God." 2 Corinthians, chap. vi. 14, 15, 16, 17.

The existence of this organ therefore settles the long discussed question as to the *propriety of pride*. Its existence teaches that the Creator has endowed man with a feeling of pleasure at the contemplation of his own excellence, not as self derived, but as a gift bestowed by the Creator: a feeling, differently possessed by different individuals. Those who have this organ small are predisposed to that humility, which consists in the not having the tendency of mind to contemplate with pleasure its own excellence.

The situation of this organ further teaches *wherein pride is proper*, and wherein improper: for it is quite evident that as this organ is situated higher than the organs of the other animal feelings, that therefore we are not to be proud of the points in which these may, in reference to the attainment of their objects of gratification, make us superior; but that we are to have the feeling of pleasure

at the contemplation of our excellence in relation to the activity of our moral feelings and of our intellectual powers. When the organ of self esteem takes this direction, it can never become in its manifestation improper pride: because the mind is perpetually discovering something more excellent to which it ever seeks to attain, and which, to be attained, preserves the pride in its state of humility; and when attained, something else is discovered which is still superior; and, thus, humility, we may assert, is begotten upon self-esteem by the intellectual faculties and moral feelings.

"It is in this way," observes Dr. Thomas Brown, that "the very religion, which ennobles man, leads him not to pride but to humility. It elevates him from the smoke and the dust of the earth: but it elevates him above the darkness, that he may see better the great heights that are above him. It shows him not the mere excellence of a few frail creatures, as fallible as himself, but excellence, the very conception of which is the highest effort that can be made by man;" "exhibiting thus constantly what it will be the only honour worthy of his nature to imitate, however faintly, and checking his momentary pride, at every step of his glorious progress by the brightness and the vastness of what is still before him."

"May I not add to these remarks," observes this gifted writer, "that, it is in this way we are to account for that humility, which is so peculiarly a part of the Christian character, as contrasted with the general pride which other systems either recommend or allow? The Christian religion is, indeed, as has often been sarcastically said by those who revile it, the religion of the humble in heart; but it is the religion of the humble, only because it presents to our contemplation a higher excellence than was ever before exhibited to man. The proud look down upon the earth and see nothing that creeps upon its surface more noble than themselves. The humble look upward to God."

The combinations of this faculty with others are almost infinite. One combination will serve to explain still more fully the functions of this particular faculty. It is the combination in its fully developed state with benevolence, and in its weakly developed state with the same organ. In the latter case the individual will speak with the greatest delight of those institutions, called the charities of our country: the other will be inclined to disparage the charities, not because he does not feel charitably, but because he thinks that men have no right to be placed in the conditions requiring these charities: that man ought to be so independent as not to need these charities, and, that, in a proper state of society, he would not need these aids.

The next organ is that of Love of Approbation.*

This organ is situated on each side of that of self-esteem: the organ of self-esteem being on the central line before referred to, and this organ on each side. When large, giving a rounded form to this part of the head.

* Marked No. 11.

Gall discovered this organ while investigating the organ of self-esteem. Gall happened to meet with a woman, who imagined herself to be the queen of France. On examining her head he was much astonished to find that she had, in the situation of the organ of self-esteem, where he expected to find a protuberance, a depression, and on each side of the site of this organ a round and large protuberance.

He soon perceived in connection with this fact, that the alienation of this woman differed essentially from that of men mad from pride: the latter being serious, calm, imperious, arrogant, and assume a majestic manner: whereas, in those similarly alienated with the woman referred to, a constant talking, blandishments the most winning, annunciations of high birth and great riches, and promises of great favours and honours; in a word, a mixture of affectation and ridiculousness are conspicuous.

Dr. Gall was thus led to see the difference between pride and vanity: and pointed out, that, while the proud man is penetrated with his greatness, and contemns all others, the vain man regards intensely the opinions of others, and seeks their approbation: that while the proud man expects that mankind will come to discover his merit, the vain man knocks at every door to attract attention to himself: that while the proud man despises marks of distinction and ill-advised praise, the vain man is nourished by the most absurd flatteries: and, finally, that while the proud man will not descend from his dignity, the vain man will abase himself to gain the praises for which he lives.

Persons, having this organ large, are anxious to know what persons think of them: they love praise.

It is a source of the greater part of politeness. It has been appropriately named the *drill serjeant* of society.

It is perfectly blind. A man may be vain to be known as the greatest drinker: or the most gay: it may be that he may wish to be known as wearing the best fitted coat: drinking the best wines: as driving the best blood horse: as wearing well a bushy set of whiskers and mustachios.

Women have this organ generally larger than men. Artists in drawing the feminine head, give a particular roundness at this part of the head: a circumstance indicating that this form corresponds to nature.

It is the basis of the love of fame: which love, like pride, has been condemned, but equally improperly. All that is required to solve these questions regarding proper activity, is to regard the situation of the particular organ.

It is situated above the other animal feelings, but behind the moral: and the same remarks are applicable to it as to self-esteem in the same relation.

As man is placed in society, he is bound to be influenced by that society: and love of approbation is to bring him under that influence.

It may be urged against this love of praise that man is commanded not to seek the praise of men: but the evil is not in seek-

ing the *praise of men;* but it is in seeking the praise of men *rather than the praise of God.* And this praise of God, though the sceptic sneers at it, and his sneer is in part sanctioned by the abominable practices that men have asserted as being done to the praise of God, is nothing more than what the sceptic himself must acknowledge ought to be the real object of search to every enlightened mind: namely, the praise of one who is good, just, and infinitely wise: the praise of one who appeals to the moral feelings, and of whose infinite excellencies the moral feelings are slight shadows: for God is not here to be viewed as an abstract first cause whose praise we are to seek; but as the *representative* of the moral feelings of man in an *infinite* degree: and man here is to be understood as expressive of the active animal feelings.

The power of this faculty, as affording, in its activity, a stimulus to exertion, is forcibly declared by Dr. Brennan's remark at the opening of the Belfast Academical Institution in the year 1814, that, in the experience, which he and his colleagues had had, "*A chaplet of laurel is, in our minds, worth a cart load of birch.*"

The universal diffusion of this power in all periods of history, and in all classes of society, is evidenced by the fact, that, in almost all nations, the *laurel*, the index of approbation, has been a satisfactory reward for deeds of the greatest prowess. The gladiator would endanger his life: the poet, his fame: the wrestler, his body: all, for the laurel.

It is true, that, in modern times, the ribbon, the garter, the epaulette, the medal, are substituted: but they are virtually the same, being conventional signs, expressive of the same feelings as the laurel used to express at former times.

And when we consider the power which the capability of gratifying this feeling gives to those who have the means, we can readily perceive the cunning of those who identified the king with the title "the fountain of honour;" thus connecting with the kingly majesty the highest point in which man can be influenced.

The day, however, is fast coming, when the king will be no more considered the fountain of honour, than he is now considered to be in this country the *fountain of power.* It may do for despotic countries; but in this country, even now, the king would not venture to give titles unless with the approbation of his ministers: nor they without the approbation of the representatives of the people; and thus it happens, that the principle is rapidly gaining ground, that the people are the sources of power as well as of honour. The king may be the outlet through which the power flows, that is, the executive; the outlet through which the honour flows: but being the *fountain* and the *outlet* through which the stream flows are two very different things, and the difference is beginning to be understood.

Passing forwards and sideways,

The next organ arrived at is that of CAUTIOUSNESS.*

---

* Marked No. 12.

This organ constitutes, as it were, the boundary of the posterior upper tier of organs; a tier, consisting of the organs of self-esteem, love of approbation, and cautiousness.

Gall was led to the discovery of this organ by the circumstance that, having met with a prelate, who never could arrive at the end of a conversation without beginning again and again; who used often to stop in the middle of a conversation to reflect whether or not he had left out something; who used, on the most trivial occasions, to adopt numberless precautions; he observed this part of the head very large in him. A short time afterwards he, at a public examination, sat behind this gentleman, who was seated beside a counsellor of regency, called Cacadubio, from his great doubting: and Gall was struck to find that the heads of both agreed in this particular organ being large. Gall hence inferred that it might be possible that irresolution, indecision, circumspection, might be connected with this part of the brain.

The differences between individuals in this respect of cautiousness every one must have observed.

This feeling of cautiousness is often exhibited in a diseased state.

It is larger generally in females than in males. Those animals that find their safety in flight, are led by a female: those that attack their opponents, by a male.

Many animals, that see by day, catch their food by night.

Gall caught, within a given time, twenty squirrels, and there was not one female amongst them: forty-four cats and only five females: five hundred bears were caught in Virginia, and only two females. In the year, 1816 to 1817, in France of the wolves killed one thousand eight hundred and ninety-four were males, six hundred and twenty-two females: circumstances, indicating the greater cautiousness of females.

Persons having this part of the head large, frequently remark, "Take care:" they use the word "but," frequently.

When active, it produces fear: and when suddenly called into activity among a number of individuals, produces a *panic*.

An individual with this organ large, and that of hope small, is apt to be gloomy, and to be filled with apprehensions both as to the present and as to the future. Preachers so constituted, preach gloomy views of Him, who is beautifully described as "Love."

It seems, in some instances, to predispose to suicide.

Children who have this large, should not be beaten because they are timid. They should be encouraged.

Cowper gives an excellent description of the absurd activity of this organ:

> "Dubius is such a scrupulous good man—
> Yes—you may catch him tripping if you can.
> He would not, with a peremptory tone,
> Assert the nose upon his face his own;
> With hesitation, admirably slow,
> He humbly hopes—presumes—it may be so.
> His evidence, if he were called by law
> To swear to some enormity he saw,

For want of prominence and just relief,
Would hang an honest man, and save a thief.
Through constant dread of giving truth offence,
He ties up all his hearers in suspense;
Knows what he knows as if he knew it not,
What he remembers seems to have forgot;
His sole opinion, whatsoe'er befall,
Cent'ring at last in having none at all."

The organ of SECRETIVENESS*

is next to be considered.

Gall had observed, when a boy, one of his schoolfellows who had many good qualities, but was always playing tricks. He held his head in a particular direction; just as a cat does when preparing to pounce upon its prey. Another companion Gall noticed, who was candour itself in appearance, but who was most perfidious in character. Gall observed that the head in both these was large immediately below and little forwards from the organ of cautiousness. Gall found afterwards in a great number of cunning, deceitful individuals, this part largely developed; and hence called it the *organ of cunning*.

Dr. Spurzheim, as the fundamental feeling seems to be the tendency to secrete, or to be secretive, called the organ, that of secretiveness.

This organ is blind. It may be very useful in enabling us to restrain the exhibition of feelings which might be unpleasant to others. Besides there are many feelings which we cannot prevent entering the mind, but which we should not desire that others should know that they enter there.

Othello, in act iii. scene 3, is represented as saying,

" Utter my thoughts! why say they are vile and false?
As where is that palace, whereinto foul things
Sometimes intrude not? Who has a breast so pure,
But some uncleanly apprehensions
Keep leets and law days, and in sessions sit
With meditations lawful?"

The proper direction of this faculty is in the fulfilment of that command, " be wise as serpents, but harmless as doves."

This organ requires particular watching over. Parents are apt to encourage it in children when young: and the organ becomes to the parent, when the child becomes a youth, the source of great troubles and inconvenience.

The manifestations of this organ in combination with other organs are very curious: the combination with cautiousness is very natural; because the two organs are situated close to each other, in fact their convolutions run into each other; and hence the activity of cautiousness, will have a natural tendency to call secretiveness into activity: and hence can be explained the cunning of an oppressed people, and hence perhaps may be explained, that the diplomatists of despotic powers are the most astute politicians.

* Marked No. 9.

MISERIES CONNECTED WITH CURVATURE OF THE SPINE.—PENNY SUBSCRIPTIONS TO DR. HARRISON'S SPINAL INFIRMARY.

Sir,

In a communication to your valuable periodical for April, I introduced the pertinent remarks of an American traveller, on the figure and the attractions of our metropolitan ladies. He says their waists are thick, short, and clumsy; the gait shuffling and ungraceful, nor do the feet always correspond or appear to be mates. Both have a leaning one way. The right out, the left in.

This description is too much justified by facts, which must make a strong impression upon foreigners, who are unaccustomed to such sights, though, by us, from their frequency they are scarcely noticed.

The American, after stating what he had witnessed, enters into no explanations. The awkward carriage and bulky appearance of many females are national reproaches; and, to effect their removal, the facts shall be placed before the rising fair, in the hope of inducing the impression that energetic means ought to be promptly used to recover that original beauty, their natural prerogative.

All this, yea more, can be accomplished in every period of life, by greater care and better management, but especially during growth. The defects referred to accompany every species of spinal incurvation. The lateral curvature of the back bone, which resembles the Italian letter S inverted, is a misfortune almost universal among British females, placed above servile drudgery. This deformity is not only *incompatible with a good figure, and destructive of beauty*, but is also *very injurious to health, and detracts from the individual's usefulness.* Persons, so afflicted, soon lose the roseous transparency of their complexions. The face is, in youth, pale and sallow. The skin, in more advanced age, becomes of an olive or greenish hue. It looks muddy and dirty, in defiance of soap and cosmetics. Individuals so circumstanced are, moreover, tormented with everlasting headaches, have little appetite, and less digestion. The smallest exertion produces palpitation of the heart, with panting, and difficult respiration. The breath is often extremely nauseous, the lungs being unable to do their duty properly, and, therefore, the important changes carried on in them are imperfectly performed. The expired air, charged with crude and offensive materials, pollutes the breath, and makes it offensive. These are some of the evils which result from spinal deformities, and are cured by their eradication. Several such examples are already upon record, and others will, ere long, be added to the list. Sufficient causes for the bad health in these instances will be seen, when it is known that the heart, the stomach, the lungs, and other viscera, are so closely tied to the back bone, that, wherever it is contorted, some of them will be forced out of their natural situations. In con-

sequence of their derangement, their offices in the animal economy can only be imperfectly executed. Besides visceral derangement, the spinal *nerves* always suffer more or less in traversing the passages through which they pass out from the spine, called the vertebral canals. This happens because they cannot glide freely along the tortuous passages. Forced into new situations, they strike against the hard sides and mouths of the bony canals. This always leads to serious inconvenience in the organs supplied by the nerves. But the effects produced differ according to the force of the application and the functions of the affected nerves.

Whenever any defects takes place in organs so necessary to the well being of the living frame, the constitution always suffers. It becomes delicate; interminable pains supervene. Persons so afflicted shift from the town to the country, and back again. They travel from spa to spa, in search of what they never find. Yet, as hope does not entirely forsake the wretched, they pursue a phantom which continually eludes their grasp. At length comes death, and they are at rest. This is no high coloured picture. Many such persons of both sexes are to be met with in the fashionable circles of our crowded metropolis, nor will the number be reduced until proper curative means are more generally adopted to remove the malady. As this is happily in their power, whenever they choose to apply the remedy, my observations are not in this respect directed to the affluent. Many indigent poor are afflicted with spinal complaints, and having no means of obtaing relief, I wish to advocate their cause. With this intention I desire to recommend Harrison's Infirmary for the Cure of Spinal and Limb Disorders, to the patronage of the humane and the benevolent. You last month kindly published a letter in its favour, and an advertisement on the wrapper. I wish to call attention to both, and to entreat support for the charity, which languishes through the want of *funds*.

To encourage the well disposed, in promoting this work of real charity and true benevolence, I wish to inform them, that the National Benevolent Institution in Great Russell Street, a flourishing establishment, was actually endowed by weekly payments of only one penny, through the fostering care of that excellent artist, and true philanthrophist, the late Mr. Hervè. It was established for the relief of aged persons, who, having known better days, are reduced to indigence. Many have already sought shelter under its ample foliage, and have poured out unceasing gratitude to their benefactors.

As a further inducement for benevolent exertion, one of the Lady Howards engaged a few years since, in aid of the City of London lying-in charity, to raise £1000 in not more than penny subscriptions: this she undertook to effect, by herself and friends, in a year and a day, or forfeit £500. She actually collected £1606 considerably within the limited period, and desisted; additional sums were afterwards received through other collectors for her Ladyship, making the total amount advanced to the charity £1636. 12s. The assistance, thus given, has already saved many destitute mothers, and their tender babes, from a lingering and

certain death !!! The directors of the hospital, to demonstrate their gratitude for such an act o. benevolence, passed a resolution, that every payment to the amount *of £20. should constitute the contributor a life governor, with a power to recommend patients.* No doubt the benefactors to Harrison's infirmary, will be entitled to the same privilege: I intend to be a candidate myself for life governor, and to encourage my friends to follow the example.

The charity for which I am the advocate would be *second to none in extent and usefulness*, were it once in full operation. Persons afflicted with deformities of the back-bone have generally passed their childhood, and would be able to contribute to the support of other helpless beings, were they only restored to good health and personal activity; under present circumstances, they are generally heavy burdens upon the state or their friends. As the malady does not always contract the span of life, although it keeps the sufferers in continual jeopardy, they must remain incumbrances upon the bounty of others, till the termination of a miserable existence comes to their relief. In order to accumulate the necessary funds, and bring the infirmary into speedy operation, I humbly *but earnestly intreat the co-operation of the benevolent in its favour;* I wish them, as in the charities above cited, to commence penny or other small subscriptions, which can hurt no one, but will in time produce a large amount. Let them bear in mind and act upon the Scotch proverb, "many littles make a muckle."

MEDICUS.

THE HUMAN BODY. Essay IX.

In the Essay in the preceding Number, the *structure*, the *uses*, the *extent*, of the human *skin* were detailed.

The *insensible perspiration*, which escapes from the skin, according to the experiments of Seguin, (detailed in the preceding Number,) amounts to *thirty-three ounces* in 24 hours.

This perspiration consists of three destructive agents, carbon, azote and hydrogen; and will not support either flame or respiration, and, consequently, must be destructive to life.

Besides this, there is a *secretion* from the skin, of water, acetic acid, and of the muriates of potash and soda.

Sweat is merely an increased amount of cutaneous perspiration and secretion.

Besides this perspiratory power, the skin seems to have an *absorptive* power.

The proofs of this are very numerous. A boy at Newmarket, who had been gr. atly reduced before a race, was found to have gained thirty ounces in weight during an hour, in which time he had only half a glass of wine.* Dr. Howe, after being fatigued and going to

---

* Bishop Watson. Chemical Essays, vol. iii. p. 101.

bed supperless, gained two ounces in weight before seven in the morning.* Keill says that he gained eighteen ounces one night in his sleep.

Madder was discovered in the urine, by Dr. Massy of America, after the body had been immersed in a decoction of this colouring matter. Rhubarb also has been found in the urine.

The places where the absorptive power is greatest are between the middle of the thigh and the hip, and between the middle of the arm and shoulder.

As such processes go on in and upon the skin, it is quite evident, that any causes which impede these processes taking place, must be injurious to the health, and must indirectly tend to the production of disease.

Of such circumstances, *uncleanliness* stands very prominent.

Dirt upon the skin must consist of the particles of dust, which are perpetually surrounding us, condensed and solidified upon the skin by means of the perspired fluid. The perspired fluids themselves are injurious to health: and dirt cannot be beneficial. This condensed dirt must prevent the free passage of the insensible perspiration, and the noxious agents already described, must be more or less in the blood, from which these are separated by the vessels existing in the skin.

The *follicles*, existing in the skin, become irritated by this want of free action. They become inflamed. They secrete an unhealthy secretion, which irritates the surrounding parts, and the *itch*, and other *cutaneous* diseases, result.

The evils which result to the individual from the impediments which are presented by dirt to this cutaneous perspiration, may be more readily understood, when the effects of the *dry skin* in fever, that is, when this *perspiration is totally checked*, are remembered. The anxiety, the restlessness, the headache, the uncomfortable thirst, the difficult breathing, all testify to the importance of the skin, when performing its proper functions. And when to this are added the facts, that the breaking out of the perspiration is often the precursor of returning health: that the medical man seeks, by every means in his power, to aid nature in promoting the action upon the surface of the body: the reflecting mind must be convinced of the importance of preserving the skin in that condition of cleanliness so essential to health.

It will be quite evident from these facts that washing should not be confined to the *face*, and *neck*, and *hands*, (though this is better than no washing at all) but should be extended to *all* parts of the body. And this universal washing should be not once a year, or once a half-year, or once a month, but *once a week* at least. Health would be promoted by this. Even the most delicate, if washing with warm water, would find the greatest benefit thence derived: and there is no danger of catching cold if the individual is well rubbed after the washing.

---

* Medical Tracts and Experiments.

It seems best in these cases to wash the arms and chest first, and then the lower parts of the body.

It is astonishing how such a mode of proceeding will promote the strength of the system, and will diminish the tendency to take cold: a tendency dependent, in a great measure, upon the power dependent upon the vitality of the skin not being strong enough to re-act, so as to throw off the injurious agency of cold, applied for any lengthened period to the surface of the body.

The bathing, or washing the surface of the body, tends to give this capability of re-action: a re-action, evidenced in bathing, when, after plunging into the sea, a comfortable glow breaks out all over the body.

THE SKIN.—ITS CLEANLINESS ESSENTIAL TO HEALTH.

In the last and in this Number some remarks upon the skin, with the view of showing its importance in the performance of those functions of the human body essential to health will be met with. The difficulty, at the same time, of realizing cleanliness by the poor in large cities, must be apparent to all. A few remarks, with a view of devising means of obviating this difficulty, by a Correspondent, may therefore be now beneficially introduced.

ON THE ESTABLISHMENT OF PUBLIC BATHS.

Sir,—If there is one sight which is more disgusting than another, it is that of personal uncleanliness. Books have been written,—pamphlets have been circulated,—tracts have been distributed,—all of which have demonstrated the connection which exists between cleanliness and health. But still, in too many instances, the advice has been disregarded; and many have lived as though they considered filth was their natural, and, consequently, beneficial element. Probably, however, this remark will apply less generally than it would have applied a few years since: thinking men have begun to act as reason dictates; and the extension of literary and scientific institutions has necessarily produced some degree of *outward* cleanliness; but THERE the reform has stayed its progress. The face and hands have been cleansed, but the other parts of the body have been entirely neglected. The consequences are that men have become subjected to cutaneous eruptions, impaired digestions, and loss of appetite; and many have become a burden to their families, who might, if they had followed the laws of their organization, have become valuable members of society. What is the cause? Have men an interest in being diseased? or to what cause shall we look for the solution of so strange a problem? To this question I have no hesitation in answering, that the evils which I have been deprecating are to be traced to a want of public baths.

It may, however, be said, that the want is comparatively a *created* one: for it is well known that the "Serpentine" may be employed

for the purpose of bathing at certain hours. At first sight this may appear to decide the question against my views;—but let us enquire if it has any disadvantages which outweigh its advantages? The Serpentine is about two miles and a half from the place where I now write, and it is not open after eight or before nine in the morning. It consequently follows, that a large portion of the inhabitants of London cannot partake of its benefits unless they neglect other, and as important, duties. But this is not its only evil. It is a most improper, because unsafe, place for bathing. Cold springs abound; weeds are allowed to accumulate near the shore, and the swimmer is therefore constantly liable to be entangled; and whilst some parts of the shore form a kind of inclined plane, other parts are abrupt and deep. In consequence of these evils accidents frequently occur; and the attendance of the Humane Society's boat alone prevents a constant recurrence of deaths by drowning.

To obviate these objections, my attention may be pointed to public subscription baths. That these baths answer the purpose for which they were established I cannot deny; but it must be recollected, that they are instituted for a particular class of persons —namely, those who can pay for their use. The price of admission may be trifling to him whose purse is well lined; but to the working man the charge would be great. I am not amongst those who would confine baths to the rich; but I would, on the contrary, extend their benefits to all men. Even if principle did not call upon me to do so, reason and knowledge would. For it must be obvious to every unprejudiced person, that, if bathing is beneficial to the rich, who have at their command every health-giving source, it must also be advantageous to him, who, in the pursuit of his daily occupations, has to imbibe a tainted atmosphere,—to engage in the performance of labours which cause him to exert his utmost strength; and who has to endure these things without earning scarcely more than will purchase the necessaries of life.

Such are the evils which present themselves to our notice when considering the present state of public baths. These evils are not, however, incurable:—they can be remedied by *substitution*. This can be done by a Parliamentary grant being made for the purpose of enclosing pieces for water for the purpose of bathing. The expence of these erections would not be great. To most great towns pieces of water are attached which might be employed for the purpose; and the local authorities would, doubtlessly, afford their utmost aid to carry the plan into effectual operation. Restrictive regulations would, of course, be necessary to prevent the intrusion of improper persons, and to regulate the hours of admission; but such restrictions could be made by the persons, or committee, appointed to manage the TOWN BATH.

Surely there could be no objection to the establishment of public baths. The country is agitated by the promulgation of plans for the mental and moral education of the people, and none can deny that such education is needed; but physical education is, at least, as necessary. In fact, the three ought to be conjoined: for, in the absence of any one, mental, moral, or physical, no system of education

would be adapted to meet the wants of the people. When the head and heart are cultivated at the expence of the body, then

"Decay's effacing fingers"

soon destroy the glorious master-piece of the Creator; and when the physical powers are strengthened at the expence of the mind, the man soon becomes unfit to perform those duties which he was created to effectuate. But let all man's powers be cultivated,—let all attain maturity—and perfection is the result.

Trusting that the object of this letter will meet with your support, I subscribe myself,

Your's, truly,

E. J. HYTCH.

New Court, Carey Street.

CORN LAWS. DISOBEDIENCE AND MISERY—OBEDIENCE AND HAPPINESS.

The readers of the last Number of the Magazine must have been convinced, by the the clear and forcible arguments of the writer, on the influence of the Corn Laws on commercial prosperity: and, it is hoped, that they will remember the view developed at the introduction of his remarks, that as God has made *man one family*, and has appointed that in the earth occupied by this family, some parts of the earth should be better suited for the production of some articles of use than other parts are: therefore, to promote the general good, there should be an interchange of these productions.

Corn is a production which other countries can produce better than we can. We can produce articles of *manufacture*, on account of having coal and *freedom*, the soul of industry, better than they can. Why then should we not take *their corn* and they take *our goods?* Because our landlords will not let us exchange them. What better proof than the following extract:

"*Warsaw, April* 29.—The council of administration of the kingdom of Poland, considering that in consequence of the fertility of last year, and the want of a *foreign market* for corn, the price has fallen so low that it does not repay the *expence of production*, has, at the instance of the director general of the committee of finance, and in order to relieve agriculture, issued an ordinance, that the Polish bank shall advance money to the inhabitants of the country on wheat and rye, to be deposited in the magazine, under its lock, and in other suitable repositories. The advance to be 3,000,000 florins for three months."—*True Sun, May* 12, 1836.

How glad would the Poles be to take our *manufactured goods* if we would take their *corn*. And why should any body of men dare to prevent; and thus to oppose the wisdom of the Almighty?

LECTURE ON DRINKS.—TEMPERANCE SOCIETIES.

As, at the present time, so much discussion is going on respecting the *use of fermented liquors* in connection with Temperance Societies, the following lecture, by Dr. Epps, may be not unserviceable:—

The subject of Drinks is a subject of peculiar importance, as perhaps more violations of the organic constitution occur in reference to *liquids*, than in reference to *solids*. Solids are longer in being incorporated with the system;—a man must digest one meal before he can, with any relish, proceed to a second; but drinks may be partaken of for a much longer continuance, and without long intervals—the fluids taken being rapidly absorbed and carried off by the action of the kidneys. Gluttons are not unfrequent—but drunkards are common characters; and even gluttons could not perform the beastly feats in which they glory, were it not for the aid of stimulants in a liquid form.

As therefore so much more liability to violation of the human constitution exists in reference to drinks, it will be our duty to point out the different articles known under that name, and to describe their uses, both in reference to *diet* and in reference to *disease*.

Water, every one must be aware, is the most simple, the most natural, and the most universally employed of all liquids: since the immense variety of liquid substances that we have consists merely of modifications of water. Water too, it must be allowed, is most suitable to the human constitution, since the great object of taking liquids seems to be, *not so much the supplying of nutriment*, as the *affording of that material* which is necessary to *confer the proper fluidity on the blood*.

Every one, however, must admire one peculiarity in water, which is, that it has no taste, no direct qualities. Hence the variety of tastes that may be communicated to it, and the pleasures which are afforded to man by this variety. The various drinks must be viewed as *additions* to water; and, in the consideration of these, we shall consider those first which are *demulcent* in their character; second those that are *stimulant;* third, those that are *stimulant* and *strengthening;* fourth, the *saline* and *refrigerant;* and fifth, some *sui generis*.

Demulcent drinks. In many cases, from the weakness of the stomach, and from various other circumstances, it is necessary to add certain substances, with the view of rendering the liquid taken not only not injurious, but also beneficial.

The first to be noticed is toast and water. This beverage, so commonly known, and still more commonly used, is very seldom properly prepared. There is a way of preparing this drink, as well as every other, properly. The bread made use of should not be large; it should be *toasted* not *burned;* and to effect this, it should not be held too near the fire—the longer it is toasting, the finer is the flavour. The water should be poured, when boiling, upon this

toast; the vessel containing it should be immediately covered; and, when cold, the water, impregnated with the aroma and the flavour of the toast, is to be poured into another vessel. It should not be made hastily, and should not be kept too long; the time sufficient to allow the liquid to cool, after the boiling water has been poured on, is the proper time. Toast and water, thus prepared, forms a drink, which, in comparison to the toast and water commonly used, is as the flavour of good Turkey coffee is to that of roasted corn.

A very strong infusion of toasted bread has been employed with benefit in some cases of severe spasmodic asthma. The theory of its action is not as yet clear.

Another method by which a demulcent quality is communicated to water, is by the addition of barley; this preparation being known under the name of barley-water.

Barley-water, properly prepared, is far from being an unpleasant drink. It will agree well with almost every stomach, and will not induce that nausea which is occasioned by many other drinks. It is milder than *oatmeal gruel;* this, in some individuals, producing heart-burn and flatulence. As a diluent, it is particularly useful in cases of affections of the urinary organs; sheathing these organs, and allaying the pain and the irritation which may have been produced. In cases of strangury, produced by the application of a blister, there is no better remedy than to drink plentifully of this liquid. The injection of opium, the taking of camphor, are not to be put in comparison with the use of barley-water. The opium may, by acting on the nervous system, deaden the pain, but does not remove the *state* of the urinary organs connected with the pain. The only decided method to effect this, is by drinking plentifully of barley-water.

There is one objection, however, against barley-water, made from the pearl-barley in common use, and that is, that, for its proper preparation, some time is required. Many contrivances have been devised to remedy this inconvenience; and among the rest, none stands more pre-eminent than the preparation, entitled *Robinson's patent barley.* This preparation, from considerable experience, I prize very highly. It forms a pleasant, very pleasant drink; and, when it is wished particularly to act upon the urinary organs, I do not know any drink that will act more decidedly. There seems to be a peculiar tendency in this preparation to promote the urinary discharge; and as, in almost all diseases, the function of the kidneys is more or less impaired, the importance of Robinson's patent barley stands peculiarly high. And, gentlemen, do not let us imagine that we are to neglect these matters of drinks, and their preparation, as beneath our notice. A knowledge of these matters is of the greatest benefit, and he who wishes to practise the healing art with success, will attend to all its minutiæ.

Oatmeal also is used for the purpose of communicating a demulcent quality to water. The preparation formed, goes under the name of oatmeal-gruel, to which the attention has been already indirectly drawn. In regard to oatmeal-gruel, it may be remarked, that oatmeal is rather laxative, and as such may be useful in certain

cases where barley-water might be less efficient. In cases of habitual pain in the stomach after taking food, I know no article that agrees so well with the stomach as water-gruel.

Having thus briefly noticed the DEMULCENT drinks, we shall proceed to those which are STIMULANT.

Under this division of stimulant drinks, alcohol, or *spirit of wine* commonly named, under all its modifications, forms the prominent example. Such are whisky, brandy, rum, hollands, gin, spirits of wine, all these being comprehended under the name "ardent spirits." To these undiluted, except when used medicinally, every well-wisher to his fellow-creatures must have a decided dislike, on account of the evils they have produced. They have been the nourisher of every vice —the destroyer of every virtue; they excite, they inflame, they elevate, but not for a continuance; they produce a war of passion.

Brandy is a good medicine. Many dyspeptics, whose food does not digest, very often experience considerable relief from the use of brandy and water in small quantities. Brandy, too, is a good stimulant in cases of typhus fever, when the powers of the system are almost exhausted—acting here even better than wine.

Rum is also useful medicinally.

Gin is still more useful. The juniper-berry, to which gin owes its peculiar flavour, is a diuretic, acting upon the kidneys, and promoting the discharge of urine. Hence the practice among persons afflicted with gravel of taking gin; a practice which, though attended with benefit when followed up with moderation, becomes a vice when the affection of the kidneys becomes an excuse for an affection for the gin.

But against whisky, surely nothing can be said! That which the poet of Scotland has immortalized by his song;—that, to which the corrupted Burns paid the tribute of some of his most favoured verses, and portions the most valuable of his time;—that, which the sturdy Highlanders, whose strength is proverbial, quaff as the mountain dew, surely cannot be disregarded, or looked upon with dread, as injurious!

One great argument in favour of whisky, and which is laid hold of by the drunkard as a guarantee against the destructive influence which he finds the intoxicating draught exerting on his frame, is the circumstance, that the Highlanders, who, it is imagined, live on whisky, are so hardy, so brave, so chivalric. The assumption of this as a fact, has often occasioned me to doubt the injurious tendency of stimulant liquors, and I endeavoured to seek, in the coldness of the climate, an explanation of what was considered to be a fact. However, I am happy for the sake of morality, for the sake of the preservation of health, that this is not the fact; and to state, on the best authority, that it is only within the last few years that whisky has been at all a common drink in the Highlands. And here, gentlemen, I shall be permitted to go a little into detail, as a development of this fact may be attended with benefit, and even with considerable influence.

For the following statements I am indebted to that worthy man, and that patron to and friend of the Highlands, Major General

Stewart, of Garth. As one fact to show how little whisky was used in the Highlands, even so late as the year 1793, General Stewart states as a fact, that a man lived on the Garth estate who had the appellation of "Donald Whisky," as characteristic of the circumstance, that he was a distiller, and sometimes a smuggler of that spirit. General Stewart further states, that, until the legal distillation of whisky was prohibited in the Highlands, it was never drank at gentlemen's tables; and that it was not till towards the middle of the last century, that spirits of any kind were drank so much as *ale*, which was then the general beverage. In further proof of this, General Stewart brings forward the testimony of Mr. Stewart, of Crossmount, who died in 1791, in the 104th year of his age, and who preserved his sound judgment and accurate mind to the last hour, and who used to say, that in his youth strong frothing ale from the cask was the common beverage at convivial meetings. In addition, it may be remarked, that a "whisky-house" is a term unknown in Gaelic. Public-houses, or taverns, are called *Taileanne*, or ale-houses. Another very striking proof that General Stewart brings forward, is the following interesting fact, in relation to the sobriety of the early Highland corps :—"During the American war, the usual allowance of spirits was served out to the soldiers of the other regiments *daily*, as they could not be trusted with more, lest the whole should be drank at once. It was otherwise with the soldiers of the forty-second regiment, who were served with a proportionate allowance every fourth day, in the same manner as the officers, with liberty to use the liquor at their own discretion—an indulgence never abused: and it was continued during the whole six campaigns."*

Thus, gentlemen, I trust you will see the necessity of not allowing your patients to deceive themselves into the opinion that whisky is wholesome, by appealing to the example of the Highlanders, since the Highlanders afford authority to a fact quite the contrary.

There are men in the world who glory in their power of taking an immense quantity of spirits; who, in the language of Divine inspiration, are said to be "strong to drink strong drink." These men advocate a very injurious proposition, which they urge as their defence; namely, that "drink," (referring to spirituous liquors, &c.) "if poison, is a very slow one;" and the enunciation of this sentence of deluded intellect is accompanied with the disgusting chorus of a horse-laugh. But after having attained the meridian of life, the collection of water in the cavity of the chest from diseased heart, or in the cavity of the abdomen from diseased liver, tells them, when, for their recovery, it is too late, that *spirits drank habitually, and in quantities so as to keep the body in a state of perpetual fever, form one of the highways to death.*

In the next Lecture will be some remarks on the other *drinks*.

---

* Agricultural Journal, No. III. p. 362.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[*ανθρωπος*, anthrōpos, *man*, and *λογος*, logos, *a discourse*.]

JULY 1, 1836.

CORN LAWS.—DISOBEDIENCE AND MISERY—OBEDIENCE AND HAPPINESS.

Among all the horrors which have been connected with the existence of Corn Laws, no one is so pregnant with iniquity, no one demonstrates the evil of these laws, more strikingly than the awful fact, that, rather than allow the price of corn to sink below a certain level, *corn has been bushelled into the rivers*, and that *when thousands were starving*.

One of the most affecting facts of this kind, and one that was attended with the moral punishment, which, it is to be hoped, will soon follow the open violation of the laws of the Creator, is contained in a valuable work, by Basil Montagu, on the Punishment of Death.

"In Espriella's Letters, he says, 'We took chaise in the morning for York. York is one of the few English cities with the name of which foreigners are familiar. I was disappointed that its appearance in the distance was not finer. We saw its huge cathedral rising over the level, but that was all. Having seen the cathedral, here called the Minster, we found our way to a public walk beside the river Ouse. There is a bridge over it of remarkable architecture, whose irregular arches with the old houses adjoining, form a highly picturesque pile. While we were looking at it we heard some one from the ships sing out 'There he goes!' and this was repeated from vessel to vessel, and from shore to shore, chiefly by boys and children, in a regular tone, and at regular intervals, almost like minute guns.

"'It was some time before we paid any attention to this; but at last it was repeated so often, that it forced itself upon our notice, and we inquired of a woman whose little girl was joining in the cry, what it meant. She told us it was a man then crossing at the ferry, whom the children always called after in this way: she could give no further account, and did not know that he had done anything to provoke it. He was a man in years, and of decent appearance.'

"The man so noticed by Espriella in his Letters, and so assailed by the populace of that ancient and civilized city, had formerly been a wealthy corn factor in a sea-port town. In a time of scarcity he was induced by the hope of still more enormous profit, to hoard great quantities of corn. It was in vain that he was intreated by his starving neighbours to bring it into the public market. He kept it until the very atmosphere was in danger of being tainted,

when it became necessary to clear his granaries, and dangerous to do it publicly. In the dead of the night he directed a confidential servant to shoot it out into the river. He saw this process with some anxiety, for, sad to say, it was sufficient to choke the current. It happened that an old fisherman at that still hour went down to his boat to set his nets: he saw the whole proceeding, and heard, when the last load moved in the water, the exulting expression '*There it goes!*' The corn factor went home and perhaps slept well: but in the morning those well-remembered words were repeated in every quarter. Alarmed for his personal safety, he turned his effects into money, and sheltered himslf in the city of York: but his history followed him. 'There it goes!' was the cry that constantly pursued him. He had been always remarkable for a very fine stout person, and for considerable obstinacy of disposition; but, though he was of a sect distinguished for firmness, it was observed that he was much shaken by this continual expression of popular indignation. He applied to the magistrates for redress; but he had no personal violence to complain of, and redress he could get none. Much altered and emaciated he left the city, and found for a short time a resting place in some distant village; but a farmer from his native town recognized and denounced him: he heard again the words which were to separate him from his fellow-creatures, and again saw human faces that looked at him with eyes of hatred: his heart was broken—he crept home and died."

We would recommend our readers to make it a practice to mark the prices of corn at Hamburgh and at London, weekly, and then a deep conviction will be produced of the evils which result from the Corn Laws. Often it will be seen that corn is twice as dear in London as it is at Hamburgh. And why? Because the people of this country are, in this important matter, foolishly ignorant.

To the Editor of the Anthropological Magazine.

Sir,—It has often occurred to me, when reflecting on the subject of phrenology, that, in those cases where the organs are, as we may call them, double, their functions must be different according to the side on which they are placed. To give an instance—Milton wrote his longest and most magnificent poem in blank verse, whereas, Pope appears to have written in nothing but rhyme. I should, therefore, be disposed to think, that, in the former instance the organ of ideality was larger on the one side, and in the latter instance, larger on the other side. Should you deem this worthy of a reply, I should feel much pleasure in reading your answer in the next Number, if convenient to you.*

I am, Sir, your's respectfully,

AN INQUIRER.

---

* We shall be glad if an Inquirer will favour us with any *facts* illustrative of the accuracy of his views.

PHRENOLOGY, BY JOHN EPPS, M. D.

Essay XI.

The part of the brain situated immediately before the organ of secretiveness, and nearly on a horizontal line with it, is called

The organ of Acquisitiveness.*

This organ corresponds in situation to the anterior inferior angle of one of the bones of the skull, called the parietal. It is situated at the temples, and gives a great width at this part of the head, forming one of the lower tier of organs at the side of the head.

Gall was led to the discovery of this organ by the facts, that, having assembled boys and other individuals of the most uneducated class, and having given them stimulants so as to make them declare their thoughts, some boasted of their thefts, others expressed horror at such conduct, and others seemed indifferent.

Gall separated these different characters from one another, and examined their heads. In the boasters, he found a fullness at the site of this organ. In those who expressed disapprobation, he found the head flat at the site referred to; and, in the third class, the development varied.

The question then occurred to Gall, Is it not possible that the development of the first class may be connected with an instinct to steal?

Gall, as physician to a deaf and dumb institution, found that the same organization existed in those living in the asylum who were in the habit of stealing: also in a number of individuals, confirmed thieves, who came under Gall's notice.

Many cases are on record, in which, under the influence of *disease*, the propensity to steal has been developed in a high degree of intensity.

Many cases are on record, in which individuals quite free of want, and otherwise of strong moral feelings, such as Saurin, the pastor of Geneva, the wife of the celebrated physician Gaubius, and others, were given to stealing.

A curious case is recorded by Gall of a Calmuck, who, being brought to Vienna, was forbidden by his priest to steal. He became unwell and nostalgic on account of this restraint: at last, the priest gave him permission to steal, but to return the things stolen. During the consecration of the mass he stole the priest's watch, and, leaping with joy, returned it when the mass was over.

Dr. Gall called this the organ of theft: but Dr. Spurzheim, perceiving that the name of an organ should not be deduced from the abuse, but from the primitive power connected therewith, called the organ the organ of covetiveness; now named Acquisitiveness.

The tendency to acquire seems to be the primitive function of this particular part of the brain. It does not direct *what* to acquire: or in *what ways*. If one acquires without a proper regard to the rights of his fellow man, it is then *stealing*.

* Marked No. 8.

It has been objected to the existence of this power that the regard for, or the sense of, property is the production of law: and as theft implies the pre-existence of property, there cannot be a *primitive* power to give rise to stealing.

The answer to this is simple. Animals do not make laws: and yet they have a sense of property. Swallows take possession of the same nest. Cows return to their own place in the bier. Bees guard the entrance to their hives.

Children, moreover, have this sense. "*That is mine*," is often the angry utterance of a little fellow, when some other little one takes away any thing belonging to him.

The acquisitiveness must be directed: and becomes, when properly directed, a most valuable organ. "Covet earnestly the best gifts," is an apostolic command. "Lay up for yourselves treasures in heaven," is a divine command.

And when it is considered that all the great improvements in society have been effected through the aid of accumulation, the importance of this tendency to acquire must be apparent. The knowledge of the present times is the accumulation of past ages: the massive buildings, the domestic conveniences, the splendid machinery, the improved laws, are the results of accumulations, physical, mechanical, intellectual, and moral, of men of past years.

Capital itself is nothing but the accumulations of surplus labour. Man is an accumulating animal; and there can be nothing wrong in accumulation: the evil is in the application of that which is accumulated.

The next organ is that of Constructiveness.*

This organ is situated anterior to acquisitiveness, and occupies a position a little upward, and backward from the outer angle of the eye.

Gall observed, that mechanicians appear to have the face as large at the temples as at the cheeks, presenting a parallel character; a peculiarity of form, which must be dependant upon the organization of the brain. After making very numerous observations upon this subject, he came to the conclusion, that a particular disposition to mechanical arts is indicated by the development of the brain at this part.

This difference of form is perceptible, not only in man, but also in animals. The skulls of animals which build are much larger at the site of this organ, than the skulls of those which do not build. Contrast the skulls of the rabbit and of the hare. In the beaver, the marmot, the field mouse, this organ is distinctly expressed.

This organ seems to give the tendency to *construct*. The nature of its constructions will depend upon the other developments of the individual.

It is large in Brunel, in whom mechanical constructive power is so evident: in Haydon, in whom the intellectual and pictorial constructiveness is so evident; and, in others, whose constructiveness seems to be active in arranging the parts of an argument.

---

* Marked No. 7.

This organ is essential to an architect; to the clever milliner.

This power is manifested in activity by idiots: so that it cannot be dependant upon the intellect.

During insanity, this power developes itself into activity. Dr. Spurzheim knew a lady in Paris, who, every time she was with child, felt a strong propensity to build.

When individuals have this large, they often spend their fortunes in buildings and in alterations.

The next organ is that of GUSTATIVENESS.

For the discovery of this organ, the science is indebted to Mr. Crook, and to Dr. Hoppe.

This organ is situated immediately before, and on a horizontal line with, destructiveness: and, when large, gives breadth across the temples, above and a little behind the cheek bones.

The function of this organ is not fully understood. Some have imagined that it is connected with the desire of taking food: others that it gives the power of discrimination as to *taste*, &c.

As yet its real functions are not accurately defined.

The next organ is that of DESTRUCTIVENESS.*

The history of the discovery of this organ is pregnant with instruction, both as to the mode adopted by Dr. Gall in making observations, and also in reference to the immense amount of evidences that have been accumulated to demonstrate its existence.

Gall, in comparing the skulls of animals, was struck with the remarkable difference subsisting between those of graminivorous and carnivorous: the skulls of the carnivorous projecting over the opening into the ear, called the auditory meatus, those of the graminivorous not extending beyond that opening. He found the same difference to exist between birds of prey, and other birds.

Gall did not deduce any conclusion from these facts for sometime. After this he received the skull of a parricide, which he put aside: after this he received the skull of a thief, who assassinated the plundered. Gall placed these two beside each other, and examined them often, and was very much struck with the fact, that, though differing in many respects, they agreed most conspicuously in a very remarkable protuberance immediately above the auditory meatus. He found this protuberance in other skulls; those of two homicides, in particular, struck him as having the same organ large.

Dr. Gall then began to reflect upon the difference between the skulls of graminivorous and carnivorous animals, and as murderers have the form of head existing in the carnivorous, the question occurred, *Is there a connection between this conformation and the tendency to kill?*

At the first, Dr. Gall revolted at the idea, but knowing that the discovery of the tendencies of nature, is one essential step to the regulation of human conduct, he determined to persevere in the inquiry.

Dr Gall further noticed, that the mere feeling of hunger is not

* Marked No. 6.

the cause of animals destroying other animals, because some destroy more than they can eat: because some dogs love the chase, others cannot be brought to love it: and because some dogs being fed upon vegetable diet, dislike game, and yet love the chase.

Dr. Gall had a dog that destroyed every living animal that he could get at. He always seized them at the neck, and never ate them.

Dr. Gall notices the fact, that naturalists have arranged animals according to their teeth; and, the opinion, that the endowment of the carnivorous, with teeth of a peculiar character, is the cause of the tendency to kill. Dr. Gall, however, properly remarks, that the difference is great between an *instrument producing a tendency*, and the instrument being made *in accordance with a tendency*.

That the disposition to kill cannot depend upon the teeth, Dr. Gall observes, is evident from the facts, first, that if the tiger had the teeth of a sheep given to it, it would not take away its carnivorous character: second, that every slaying animal has a different method of killing its prey; and third, that the hamster and others, which have the teeth of a graminivorous animal, are very blood thirsty.

As a further evidence of the accuracy of the view regarding this organ, Dr. Gall states, that the organ is larger in the eagle and falcon than in birds who are destructive of life, but less so than these birds.

Gall noticed in animals that destroy their prey differences in development: some, who were very destructive, had the organ large: others, not so destructive, had the organ small. All cats, good mousers, have this region of the skull large.

Leaving these animals for man, the question occurs, *is man naturally "carnassier?"*

Man is *carnivorous*, so far as can be judged from his teeth. He, therefore, has to feed upon flesh, and, as such, like other animals, has an impulse to kill: and that this impulse differs, in degree, from the simple pleasure of seeing killed, to the intense desire to kill.

This assertion is justified by facts. In earliest infancy, some children exhibit a pleasure in tormenting animals, others are quite the contrary. Gall met with a student, who frightened his fellow students by the cruelties he practised upon inferior beings. He studied surgery to gratify his passion. A rich Dutchman allowed the butchers a certain sum to allow him to kill the beasts.

Many men seek after executions. They delight in them. The celebrated La Condamine did so; and one day pushing forward to see an execution, and, being repulsed, the executioner observed, "Let the gentleman pass, he is an amateur." Professor Briggman, at Leyden, mentioned to Dr. Gall a priest, who had so strong a delight in seeing persons killed, that he took the chaplaincy of a regiment. This man always killed the animals for his own kitchen. He corresponded with the different executioners to know what executions were to take place: which he attended. On the field of battle, some soldiers delight in killing, and slay after the necessity ceases; others do not.

In the chronicles of brigandage, instances too frequent occur of men, who, not content in mere stealing, have delighted in tormenting and killing without necessity. Gall relates the case of John Rosbeck, who invented the most cruel kinds of torture. He was subjected to severe punishment; but with no benefit: when set at liberty he committed many murders, and was taken and executed.

About the beginning of the last century, many murders were committed in Holland. The murderer was undiscovered. At last an old violin player, who visited the village, was suspected. Arrested and taken before the magistrate, he confessed to thirty-four murders which he had committed, without any enmity or desire to rob the parties, but merely because he felt an extraordinary pleasure in so doing.

Prochaska relates, in his works, two cases, one of a Milanese woman, who slew children, sucked their blood, and ate of their flesh: and another of a man, who killed a traveller and his daughter in order to devour them.

Gall knew a girl, who was the child of a cannibal, and yet, though brought up away from her father, felt the desire to eat human flesh.

Many similar cases of delight in cruelty are recorded in Gall's writings.

Gall concludes his statements by asking the too much justified questions, *Is there a spot upon the earth not dyed with human blood? What various instruments of torture and of destruction exist! And why, ah! why is military glory placed above all others?*

He then refers to Caligula, who gave innocent people to be devoured by wild beasts: who forced parents to assist in the death of their children: who amused himself in putting questions to those in torture: who wished that the Roman people had but one head, so that he might strike it off at one blow. To Nero, who poisoned Britannicus, massacred his mother, and the husband of a lady to whom he had offered violence: who sacrificed the objects of his lust: killed Octavia his wife, and some of the noblest worthies of Rome: who set fire to the four quarters of Rome, and mounted a tower to have the pleasure of beholding the spectacle: who burned the Christians in pitched jackets, burning them at night so as to serve, as he said, for lights.

The existence of all these deeds of horror necessarily leads the mind to the conviction, that a power must exist in the human mind, of which *these are the abuses.*

Gall came to a conclusion more repugnant than this; and called this particular part of the brain, that he had found so large in murderers, the *organ of murder.*

Dr. Spurzheim, however, satisfactorily showed that murder is one of the abuses of this organ, and not its legitimate function. He showed that this gives the *tendency to destroy.* The objects destroyed may be animate or inanimate.

The great difference between this organ, as associated *essentially* with *murder*, and as associated merely with the *tendency to destroy*, will be evident, on remembering that it is not in the *mere destruction of life* that murder consists, but in the destruction of the life of

a being who is *endowed with certain powers*. Destroying a dog or a cat we do not call murder. Destroying a human being, that is, a being endowed or supposed to be endowed with certain feelings, then the act of destructiveness is designated murder.

The term *destructiveness*, however, was employed by Dr. Spurzheim to indicate the particular power connected with this part of the brain.

It seems to impart energy to the character. Is a constituent in anger. Is a kind of protector to the possessor, giving a particular tone to the voice, which warns an aggressor of his danger.

Children and persons, who have this large, are apt to be passionate, and, with small benevolence, cruel.

The intimate connection between the activity of this organ in the exhibition of anger, and the activity of it as connected with the perpetration of murder, is evidenced by the statement of Divine Wisdom, "*He that is angry with his brother, without cause, is* A MURDERER."

Destroying any thing seems to afford satisfaction to this organ. The proper direction is to destroy, by proper means, what is evil in our character, and in the institutions by which we are surrounded, and which are continually exercising an influence upon the well-being of society. Paul converted was as destructive as Saul unconverted; the direction being different, constituted the great difference.

Destructiveness is an excellent organ.

LARGE HEADS. COMMANDING POWER.

SIR,—The remark of Dr. Epps, in one of his Essays, that a large head is essential to command and to exercise real and irresistible influence, may, perhaps, receive a good illustration from the following anecdote of Rowland Hill.

This worthy man visited the iron bridge, when the foundations upon which its arches rest, were building. The men were engaged in one of the coffer dams, swearing, and working, and talking, in fact, it was like a little babel of confusion. The manager went with Rowland Hill to show him the works; and when he came to the part where the noise existed, with that power of voice, arising from a powerful head, commanded immediate silence, he linking into the word of command an *oath:* The storm was calmed, and perfect silence reigned. Rowland Hill looked at the man with astonishment on beholding the immediate effect of his command, and said, "*Friend, thou art fit to rule in hell.*"

I could enumerate many instances in which this power of command, inducing instantaneous obedience, is connected with a large head. It was so with Napoleon. I have known several schoolmasters with large heads, who, without the use of the cane, merely by the *tone of the voice*, could make boys, as the expression is, shake in their shoes.

Believe me, Sir, your well wisher,

A HEAD THAT HOPES TO GROW.

PHRENOLOGY, BY JOHN EPPS, M. D.

Essay XII.

The organ situated behind, and little lower in position than the organ of destructiveness, is

That of Combativeness.*

The site of this organ on the skull is indicated by the inferior and mastoid angle of the parietal bone.

Dr. Gall was led to the discovery of this organ by observing the dispositions of boys and others collected from the streets. He gave them wine, and when excited, made them fight each other. Some enjoyed the practice; others did not, being peaceable and timid. In the former, the head at this part was large: in the latter, the head at the same part was flat and depressed.

The prominence he found large in brave officers, in duellists, and in quarrelsome persons in general. Mr. Hawkins has observed it large, generally, in the Prussian army, and small in the Austrian army: a difference of organization manifested in the facts, that the Prussians are very fond of fighting; the Austrians, not. Mr. Hawkins has noticed the great difference in shape of head at this part between the *militia* men, the *volunteers*, and men of the *regular army;* the last having this organ large.

Dr. Gall found that courageous animals are characterized by a similar protuberance: That a horse that is bold and sure can be known from a horse that is shy and timid, by the form of head. Game cocks and game hens have their heads larger in this part than domestic cocks and domestic hens.

Dr. Gall considered this organ as connected with *self-defence*. It seems to be connected with *physical* courage, in contradistinction to *moral* courage, which is the result of combined firmness, conscientiousness, self-esteem, and the higher organs.

Dr. Spurzheim called it *Combativeness*, a name now generally received.

It has been imagined that courage depends upon *strength*. This is proved not to be the case by the well-known fact, that many most powerful men are not courageous, but cowards. The strongest animals too, are not the most courageous. A great difference exists between *confidence* and *courage*. A timid man may gain confidence. Confidence is produced by the conviction arising from the successful performance of any act: whereas, courage would inspire to the actual performance, from the success of which, in the timid man, confidence springs.

This organ is exhibited large in the Caribs, king Robert Bruce, the ancient gladiators; and small in the Hindoos and Ceylonese.

---

* Marked No. 5.

The remaining organs constitute what has been named the DOMESTIC GROUP.

A line drawn from the root of the nose across the central part of the head has been often referred to. On this line the first organ is individuality, then eventuality, comparison, benevolence, veneration, firmness, self-esteem, and then

The organ of INHABITIVENESS.*

This organ is, therefore, situated immediately below that of self-esteem.

Dr. Gall considered this organ and that of self-esteem to be one and the same: but cases occur in which the organ of self-esteem is large and this is small: and the reverse.

Dr. Gall found this part of the head large in those animals, such as the chamois, the wild goat, that love elevated situations.

Every animal, it is well known, has its own peculiar place. The little ducklings run to the water as soon as they are hatched. Other young animals stay upon dry land. Some like high regions: some prefer the plains. Some birds delight in hovering in the air: other birds, whose power of flying is greater than those who hover, do not hover in the air.

Dr. Spurzheim, conceiving that this part of the brain gives the tendency to remain in the place inhabited, called it by the name of inhabitiveness.

Mr. Combe, and some other phrenologists, consider that this organ imparts the power of permanence not only to *place*, but in regard to *emotions and ideas*. And as such a permanence leads to the concentration of these emotions and ideas, the term CONCENTRATIVENESS has been applied to this organ.

This organ is small in the American Indians; it is large in Negroes and Europeans.

The Scotch seem to have this feeling strong. Burns' poems contain frequent appeals to this feeling.

In Rogers's poems are some beautiful illustrations of the power of this attachment to home. One beautiful reference to the power of this feeling, as awakened by accidental impressions, is contained in the following lines:

> The intrepid Swiss, that guards a foreign shore,
> Condemned to climb his mountain cliffs no more,
> If chance he hears the song so sweetly wild,
> Which on those cliffs his infant hours beguiled,
> Melts at the long lost scenes that round him rise,
> And sinks a martyr to repentant sighs.†

The advantages resulting from such a power must be apparent to

---

* Marked No. 3.

† This song was the Ranz des Vaches; of which song Rousseau writes in his Dictionary of Music. This air was so beloved by the Swiss, that it was forbidden for any one, under pain of death, (in France where the Swiss guards then existed) to play it; because it made them weep, desert, and even die; so strongly did it excite the desire to return home.

all. It gives a tie which binds each individual to the place of his nativity. It makes the Laplander love his barren scene: and the Esquimaux his dreary domain of ice and snow.

Its abuses are manifested when a morbid aversion to moving abroad exists: and when an individual will not leave his place, though duty should call him to go elsewhere.

"Why is 'home, sweet home,' a song so generally agreeable? What made the Canadian Indians, when once solicited to emigrate, to reply, 'What! shall we say to the bones of our fathers, Arise, and go with us into a foreign land?' What but the pleasure connected with the exercise of this faculty made cardinal Richelieu, when building his magnificent palace, on the site of the old family chateau at Richelieu, sacrifice the symmetry of the building in order to preserve the room in which he was born? It is from the feeling of pleasure connected with the activity of this faculty, and of adhesiveness, that we feel admiration at the beautifully noble declaration of Ruth to Naomi, her mother-in-law, who, when about to return to her native country from Moab, the country of Ruth, requests Ruth to remain behind; the attached girl states, 'Entreat me not to leave thee, or to return from following thee: for to what *place* thou goest, I will go; and in what *place* thou shalt lodge, I will lodge; thy people is my people, and thy God, my God: for where thou shalt die, I will die, and there will I be buried: thus Jehovah will provide for me, and thus again: for death must divide between me and thee.' Book of Ruth, i. 16, 17. from Bellamy's translation."

"Perhaps there is no passage in any of the volumes in the Library of Entertaining Knowledge which contains more simple feeling than the following, referring to the hawthorn tree: a passage generally admired, the reason of which admiration being evidently the feeling of delight connected with the activity of INHABITIVENESS. 'There is something about the old and gnarled hawthorn, which one bred in the country cannot soon forget, and which a visitor learns sooner than any association of placid delight connected with rural scenery. When, too, the traveller, or the man of the world, after a life spent in other pursuits, returns to the village of his nativity, the old hawthorn is the only playfellow of his boyhood that has not changed. His seniors are in the grave; his contemporaries are scattered: the hearths at which he found a welcome are in the possession of those who knew him not; the roads are altered; the houses rebuilt, and the common trees have grown out of his knowledge; but, be it half a century or more, if man spare the old hawthorn, it is just the same—not a limb, hardly a twig, has altered from the picture that memory traces of his early years.'"*

This organ, acting with self-esteem, produces John Bullism's love of country.

It is a curious fact, which Dr. Spurzheim was the first to notice, that the Saviour of mankind never gave a precept, "*Love your country.*"

---

* Horæ Phrenologicæ, Three Phrenological Essays. E. Palmer & Son, Paternoster Row.

If two oblique lines drawn outwards and downwards towards the ears from the organ last described, each one will lie on the next organ, namely,

That of Adhesiveness.*

A lady was brought under the notice of Dr. Gall, who, more out of complaisance, than from any other feeling, took a cast of her head. To his great surprise, however, he found two protuberances in the situation of this organ, which he had never observed in any head he had previously examined.

He inquired of her friends her character, and found that she was well known as being a model of friendship: her attachment never varying whether in adversity or in prosperity, she having experienced many vicissitudes.

From this, and other observations, he was led to enquire whether friendship could be dependant upon any particular organ.

He was told that friendship arose from the conviction of our needs being supplied. In opposition to this, however, the fact at once suggested itself, that friendship often occurs without the perception of need, and further, friendship subsists between animals; tigers and dogs, lions and dogs, horses and dogs, have been known to live in friendship. In these cases the existence of need, and that need supplied, could not be present.

Dogs have been known to die on the tombs of their masters.

The existence of society is dependant, in a great measure, upon this organ, and its existence demonstrates that man is a *social* being. So are some animals: and those who live in society have an organization different from those that do not.

The existence of this organ is demonstrated by its diseased manifestations. Gall relates the case of a patient who was three times deranged: once at the death of a brother; a second time at the death of his father; and a third at the death of his mother.

Women have it larger than men: hence attachment on the part of women is more powerful than the same feeling on the part of men. The hysterical feeling, so common with delicately nerved women, seems to be dependant upon this organ. Men have hysterics. The Essayist had a friend, a very strong individual, who had an attack of hysterics on hearing of the death of his brother. He had very large adhesiveness. The greater strength of this feeling in women has never been referred to, perhaps, in words more beautiful, than those used by the royal bard of Israel, to indicate the love he bore to his friend Jonathan, on hearing of his death—"Distress is on me because of thee, my brother, Jonathan; thou wast exceedingly delightful to me: wonderful thy affection to me, *above the love of women*." 2 Samuel i. 26.†

Individuals, who have this organ large, are very apt to form attachments, which often bring them into great trouble.

The feeling is blind, and does not guide to the proper objects on which the faculty ought to outgo.

---

* Marked No. 4.

† This is from Mr. Bellamy's invaluable translation of the Scriptures from the original Hebrew.

When friendships are formed from the activity of this, in conjunction with the lower feelings, misery very frequently results; since such friendships can be permanent only so long as the objects exciting the lower feelings exist; which exciting these feelings, awaken by their activity the organ of adhesiveness. Hence it is phrenologically true, that prosperity (which presents objects appealing to the lower feelings, and thereby excites adhesiveness,) brings friends; and adversity (which takes away these objects) tries them.

When friendships are formed upon the higher feelings they *must* be permanent, because the objects upon which they outgo are not subject to change: goodness remains goodness, conscientiousness remains as such, under every change of fortune.

The organ next to be considered is that of PHILOPROGENITIVENESS.*

That a love of offspring exists generally in the animal creation cannot be disputed. That this must depend upon a power with which the Creator has endowed the various individuals, must appear evident also. Though these propositions appear true in themselves, few have attempted to ascertain the cause of the strong attachment subsisting between the parent and the progeny.

Dr. Gall, in examining the heads of different individuals, was struck with the fact that the heads of female animals are much larger than the heads of male animals, in the part situated immediately under the organ of inhabitiveness, on the central line already referred to: the largeness in the female head, giving a peculiar length to the female head in that particular direction.

Dr. Gall found many opinions respecting the cause of this difference, but could not arrive at any one, that would satisfactorily explain the facts.

At length, on one occasion, when engaged in lecturing, he was struck with the fact, that monkeys, that have this part of the head very large, are noted for the attachment they manifest toward young, more particularly to their young. It immediately occurred to his mind, may it not be possible that the attachment to offspring is dependant upon the existence and the development of this particular part of the brain. He followed out this idea, and the result was, a settled conviction that the portion of brain situated just above the little node, which exists on the lower central and posterior part of the head, is connected with love of offspring.

In favour of this organ and its functions more evidences can be adduced than for any other organ in the human head. Its site is so easily observed, and its development is generally striking.

The fact that this organ is larger in the female than the male, affords a pleasing testimony to the wisdom of the Creator: inasmuch as the female has all the arduous duties to perform in regard to bearing, attending to, and protecting the little object of helplessness.

Hence it happens that the male will, when pursued, desert the young sooner than the female will. Hence it happens that female children are so fond of dolls, of dressing and undressing them; of

* Marked No. 2.

combing and uncombing; of putting to bed at night; of taking them and caressing them; and similar practices.

Hence it happens that the Creator, when referring to the love that he bears to them who obey his commands, asks the question "*Can the mother forget her sucking child?*" Why should the Infinite have used this question, unless he knew that the strongest feeling he had implanted in the mother's head is the love of offspring.

The generally existing large development of this organ in the female head, and its consequent manifestation in the character, afford an explanation of another fact, namely, the feeling of disappointment when a woman appears destitute of this feeling. What unnatural mothers they appear.

This organ is often manifested in a *diseased* state, and women frequently become diseased in reference to this organ. Dr. Gall relates the case of a young lady who fancied herself to be pregnant with six children; and in her this organ was very large: also another case of a highly respectable, young, unmarried lady, who gave out that she was pregnant.

When men have it large they are very much attached to children, and children soon discover it.

Dr. Gall relates the curious fact, that, in twenty-six infanticides he examined, the organ was small. It is well to remember, however, that the want of this organ does not impel a mother to destroy her child, but renders her less able to resist those circumstances, which may act as temptations to effect the destruction.

Wordsworth's poetry is beautifully exhibitive of the power of this feeling. Kotzebue also must have possessed this feeling strong. The following is a conversation held between the husband and the wife, Alonzo and Cora:—

"*Cora.* I am sure he will speak soon: then will be the last of the three holidays allowed by nature's sanction to the fond anxious mother's heart.

"*Alonzo.* What are those three?

"*Cora.* The extacy of his birth I pass: that in part is selfish: but when first the white blossoms of his teeth appear, breaking the crimson buds that did incase them; that is a day of joy: next when from his father's arms he runs without support, and clings, laughing and delighted, to his mother's knees; that—that is the mother's heart's next holiday; and sweeter still the third, whene'er his little stammering tongue shall utter the grateful sound of father, mother! O that is the dearest joy of all."

The power of this feeling, when awakened to activity by a female becoming a mother, is very beautifully pourtrayed by Dr. Reed:

"How common is it, to see a young woman in the gayest period of life, who has spent her days in mirth, and her nights in profound sleep, without solicitude or care, all at once transformed into the careful, the solicitous, the watchful nurse of her dear infant: doing nothing by day but gazing upon it, and serving it in the meanest offices; by night, depriving herself of sound sleep for months, that it may be safe in her arms. Forgetful of herself, her whole care is centred in this little object. Such a sudden transformation of

her whole habits, and occupation, and turn of mind, if we did not see it every day, would appear a more wonderful metamorphosis *than any that Ovid has described.*"

When thought meets thought, ere from the lips it start,
And each warm wish springs mutual from the heart.

DROWNING-AT-SEA SOCIETY.—DISOBEDIENCE AND MISERY—OBEDIENCE AND HAPPINESS.—HORRIBLE CATASTROPHE.

In the preceding Numbers of this Magazine (Nos. 4, 5, 6, and 10,) it was shown that ships can be built so that they can be water tight: that ships, thus built, could not sink: that ships are not so built: but that ships are built to sink, and that it is a great benefit to the shipowner that the ship should sink after a certain time, if it be insured. Some additional facts are now to be added.

It is a too well established fact, that East India ships, when they have served the usual time in the China trade, and are, therefore, unfit, are sold to be employed in the Quebec, to carry out *emigrants*, and to bring back *timber*.

The consequences thence likely to arise from such, and similar arrangements, may easily be conceived. The following case, for the truth of which the most undoubted testimony is to be given, will illustrate what these consequences often are.

The ship *Earl Kellie*, Captain Hindmarsh, sailed from Ireland with two hundred and sixty emigrants for North America, and after landing them, proceeded to the river St. Lawrence to load timber for London. The *Earl Kellie* was an old Quebec built ship, fit only for condemnation. She was loaded with timber, was driven on shore, and so much damaged as to be obliged to return to Quebec, discharge her cargo, and be repaired. While undergoing repair, under the inspection of the owners, resident at Quebec, the carpenter remonstrated with the captain, that the ship was not properly repaired, and was not fit for the passage. So evident was this, that several of the crew persisted in leaving, or were discharged.

Notwithstanding this, the ship sailed for London on the 29th of November; they had a fine westerly breeze, which gradually increased to a violent gale. The ship was very leaky.

On the 4th of December the ship, being in a most distressed state, and half full of water, was brought to, and, having no after sail to set, she lay broadside to the sea, and being struck by one, upset, the captain and ten of the crew were washed overboard. The second mate and a lad, both sick, perished in their hammocks: of the remaining seventeen of the crew, one was left dying on the wreck; one died afterwards; fifteen remained on the wreck until the seventh day, when they were taken off having had only six rats to subsist on all that time.

Can any one pretend to say that this ought to be? And that such cases are not uncommon is evident, by the blood-chilling fact, that the *owners of the Earl Kellie have lost* SEVEN *ships of this kind within* TWELVE *months! !*

HOSPITAL LIBRARIES.

That the soul and body are intimately connected, that they act and re-act on each other, and that they exercise a mutual influence, —are truths which the most superficial observer cannot deny. But yet these truths are too often disregarded; and men act as though they considered the soul and body to be two isolated things,—separated from each other by some impassable barrier, and between which there is an unfathomable chasm. For a proof that this mournful statement is not a mere assertion, we have only to look around us: the systems of education, at present pursued, evince that the body is altogether neglected or forgotten; whilst in hospitals the same error takes a different direction, namely, disregard of the mind.

Let us take a glance at those noble institutions designated "Hospitals." In them medical talent and experience of the first class is engaged; and nothing is left unemployed which can, in the smallest degree, conduce to the restoration of the *physical health* of the inmates. But there is one thing forgotten or disregarded, namely, that the body is rarely diseased without producing the same effect on the mind. Bodily weakness necessarily induces a prostration of the mental faculties; and the languor produced is often more fatal than mere physical disease. Men of the highest genius have described, in thrilling language, the injurious effect which bodily indisposition produces on the mind; and similar effects are produced by the same cause on men less gifted than a Johnson or a Cowper.

Medicine is as necessary for the mind as for the body. One of the medicines, which most tends to impart an healthy tone to the mind,—which most induces the mind's natural equilibrium,—is *a* book. Reading produces a cheerfulness of spirit: it calls into action dormant faculties of both mind and body; and, by abstracting the mind from attention to bodily suffering, gives a stimulus to the body to exert its powers. However in our hospitals no provision is made for this *governing law of our constitution*: there are no libraries attached to our hospitals. It is true that in some hospitals the inmates are allowed to peruse those religious tracts which may be lent by benevolent men; but this is not the kind of reading which suits a sick chamber. Not that I wish to depreciate the reading of tracts, for I am aware that they have been highly beneficial, and that, when introduced in suitable places, and at fitting times, they can be productive of much good. But the sick man is not capacitated even to understand, much less to appreciate them. The consideration of abstruse theological questions can neither interest or benefit him who is overwhelmed by disease,—whose

> "Sensible warm motion has become
> A kneaded clod,"—

who is oppressed by an almost insupportable degree of languor; and whose mind is clouded by the restlessness consequent upon

sleepless nights and wearisome days. No; in such a situation, reading of a different character is required: a reading such as will not demand the exercise of the reflecting organs; and the perception of which will not require the employment of deep thought, or occasion the exercise of fixed attention.

Why is this state of things allowed to exist? Libraries for the young,—school libraries,—congregational libraries,—village libraries,—are being instituted; why should HOSPITAL LIBRARIES not be founded? It cannot arise from ignorance of pathology; but no writer, that I am aware of, has advocated the establishment of such libraries. When we recollect this, I shall certainly be considered as justified in asserting, that we have but entered the vestibule of knowledge. Science has left her hidden cells, and has come forth amongst the people: she is no longer confined to men of a certain rank, or to men who are engaged in certain pursuits; but she has yet to enter the abodes of men, she has yet to reform the interior of men's habitations, and she has yet to make her discoveries,—simple and obvious to him who rightly employs his faculties, though to others dim and obscure, as a starless night,—available to the restoration to society of him, who has been bowed down by the weight of accumulated sorrow and affliction!

If science is not thus made of practical utility,—if it is only regarded as a subject for speculation, and not of appreciable good; then the dark and dreary middle ages, when the world was in a state of transition from darkness to *comparative* light, will no longer suffer when compared with the present age. For though those ages were buried in ignorance, and the turmoils of war and change forbade men to engage in scientific pursuits; yet still the progress which they made in knowledge, was an idea of the progress which they made in *civilization*, that is, the PRACTICAL APPLICATION OF SCIENCE. What they knew was made beneficially available,—it is for us to imitate their example. Let us do this, and then we shall no longer see our hospitals unfurnished with *mental medicine*: but both the physical and intellectual state of the patients will be regarded, re-invigorated, and established. Let it not be said that it is beyond our power: there is nothing in the cognizance of man which cannot be attained, if it is pursued with determination and perseverance. If we cannot do all we wish, let us do what we can, and then we shall do much more than we expected!

E. J. HYTCH.

New Court, Carey Street.

THE DUTY OF A STATE IN RELATION TO MATTERS OF RELIGION.—BY LORD JOHN RUSSELL.

"When you talk of the duty of a state, the duty of a state is not *to choose and select that doctrine* which the legislature or supreme authority may consider to be founded in truth, but to endeavour to secure the *means* by which they can inculcate religion and morality among the great body of the people."—*Lord John Russell's Speech on the Tithe Bill, June* 1836.

DR. CHALMERS. HIS PAST AND PRESENT OPINIONS. TRUTH NOT AIDED BY FORCE.

The career of Dr. Chalmers is one which has connected with it no common character. He is a man, formed in a superior mould, whose mind, from the very essential greatness of its constitution, rose with a brilliancy, indicative of the meridian splendour afterwards exhibited. He took an extended grasp of the subjects that came within his mental horizon, and many of his conclusions were pregnant with justice, and were issued into the world with a character peculiarly bright.

In the year 1829, the writer of this notice happened to be at Lewes, in Sussex. At this time the catholic claims were being contested in parliament, and the ignorant rustics in various parts of Sussex, stirred up by the bigotted, carried about pictures of persons being burned, and subjected to other tortures, so prevalent in the dark ages. A friend, Mr. Henry Browne of Lewes, perceiving that a good opportunity for counteracting these attempts would be afforded by an æronaut, who, proposing to ascend in Sussex in a balloon, might scatter about in various parts of the country any information upon the subject of catholic emancipation, reprinted the following speech of Dr. Chalmers, and gave the æronaut many copies to circulate; thus, as it were, showering down heavenly principles from heaven.

Speech of Dr. Chalmers on Catholic Emancipation, delivered at Edinburgh, March 14th, 1829.

I came here to-day in the spirit of devotedness to the holy cause of protestantism; for in the proposed emancipation of papists, I see for protestants a still greater and more glorious emancipation. The truth is, that these disabilities have hung as a dead weight around the protestant cause for more than a century. They have enlisted in opposition to it, some of the most unconquerable principles of nature; resentment because of injury, and the pride of adherents to a suffering cause. They have transformed the whole nature of the contest, and, by so doing, they have rooted and given tenfold obstinacy to error. They have given to our side the hateful aspect of tyranny, while on theirs we behold a generous and high-minded resistance to what they deem to be oppression. They have transformed a nation of heretics into a nation of heroes. We could have refuted and shamed the heretic out of his errors, but we cannot bring down the hero from his altitude; and thus it is, that from the first introduction of this heterogeneous element into the question, the cause of truth has gone backward. It has ever since been met by the unyielding defiance of a people, irritated, but not crushed, under a sense of indignity, and this notable expedient for keeping down the popery of Ireland, has only compressed it into a firmness, and closed it into a phalanx, which, till opened up by emancipation, we shall find to be impenetrable. Gentlemen

would draw arguments from history against us, but there is one passage in history which they can never dispose of. *How comes it that Protestantism made such triumphant progress in these realms when it had pains and penalties to struggle with; and how came this progress to be arrested from the moment it laid on these pains and penalties in turn?* What have all the enactments of the statute-book done for the cause of protestantism in Ireland? And how is it, that, when single-handed truth walked through our island with the might and prowess of a conqueror, so soon as propped by the authority of the state, and the armour of intolerance was given her, the brilliant career of her victories was ended? It was when she took up the carnal and laid down the spiritual weapon; it was then that strength went out of her. She was struck with impotency on the instant, that from a warfare of principle, it became a warfare of politics. There are gentlemen opposed to us profound in the documents of history, but she has really nothing to offer half so instructive as the living history that is now before our eyes. With the pains and penalties to fight against, the cause of reformation did almost every thing in Britain; with the pains and penalties on its side, it has done nothing, and worse than nothing, in Ireland. But, after all, it is a question which does not require the evidence of history for its elucidation. There shines upon it an immediate light from the known laws and principles of human nature. When truth and falsehood enter into collision upon equal terms, and do so with their own appropriate weapons, the result is infallible. *Magna est veritas et prævalebit.* But if to strengthen the cause of truth, you put the forces of the statute book under her command, there instantly starts up on the side of falsehood, an auxiliary far more formidable. You may lay an incapacity on the persons, or you may put restraint and limitation on the property of catholics; but the catholic mind becomes tenfold more impregnable than before. We know the purpose of these disabilities. They were meant to serve as a barrier of defence for protestants against the encroachments of popery; and they have turned out a barrier of defence for papists against the encroachments of protestantism. They were intended as a line of circumvallation around the strongholds of the protestant faith, and in effect they have been a line of circumvallation around the strongholds of the catholic faith. It is to force these now difficult and inaccessible strongholds, that I want this wall of separation taken down. When I speak of force, it is the combined force of truth and charity that I mean, and it is precisely because I believe it to be omnipotent, that I am an emancipationist. It is precisely because I agree with the duke of Wellington in thinking, that, if civil distinction were done away, the result would be the spread of protestantism in Ireland. Had we been suffered to mingle more extensively with our catholic fellow-subjects, and to accompany with them in the walks of civil and political business, there would at this day have been the transfusion of another feeling, the breathing of another spirit amongst them; nor should we have beheld, as now, the impracticable countenance, the resolute and

unyielding attitude of an aggrieved and outcast population. I am sensible of one advantage which our opponents have against us, and that is a certain command over the religious feelings of the population. And yet I am not aware of any public topic on which the popular and prevailing cry ever ran so counter, as it does at present, to the whole drift and spirit of christianity. What other instruments do we read of in the New Testament, for the defence and propagation of the faith, but the Word of God, and the Spirit of God? How does the apostle explain the principle of its triumphs in that age, when truth was so mighty in the pulling down of strongholds? It was because the weapons of his warfare were not carnal. He confined himself to the use of spiritual weapons, the only ones by which to assail the strongholds either of popery or paganism. The kingdom of God, which is not of this world, refuses to be indebted for its advancement to any other reason; and scripture, and prayer —these compose, or ought to compose, the whole armoury of protestantism; and it is by these alone that the battles of the faith can be successfully fought. It is since the admission of intolerance, that unseemly associate, within our camp, that the cause of the reformation has come down from its 'vantage ground; and from the moment it wrested this engine from the hands of its adversaries, and began to wield and brandish it itself, from that moment it has been at a dead stand. We want to be disencumbered of this weight, and to be restored thereby to our own free and proper energies. We want truth and force to be dissevered from each other,—the moral and spiritual to be no longer implicated with the grossly physical; for never shall we prosper, and never shall we prevail in Ireland, till our cause be delivered from the outrage and contamination of so unholy an alliance. It is not because I hold popery to be innocent, that I want the removal of these disabilities; but because I hold, that if these were taken out of the way, she would be tenfold more assailable. It is not because I am indifferent to the good of protestantism, that I want to displace these artificial crutches from under her, but because I want that, freed from every symptom of decrepitude and decay, she should stand forth in her own native strength, and make manifest to all men, how firm a support she has on the goodness of her cause, and on the basis of her orderly and well laid arguments. It is because I count so much, (and will any protestant here present say that I count too much?) on her Bible, and her evidences, and the blessing of God upon her churches, and the force of her resistless appeals to the conscience and understandings of men; it is because of her strength and sufficiency in these, that I would disclaim the aids of the statute-book, and own no dependance or obligation whatever on a system of intolerence. These were enough for her in the days of her sufferings, and should be more than enough for her in the days of her comparative safety. It is not by our fears and our false alarms that we do honour to protestantism. A far more befitting honour to the great cause is the homage of our confidence; for what Sheridan said of the liberty of the press, admits of most emphatic application to this religion of truth and liberty. "Give," says that orator, "give to ministers a

corrupt House of Commons; give them a pliant and a servile House of Lords; give them the keys of the treasury, and the patronage of the crown; and give me the liberty of the press, and with this mighty engine I will overthrow the fabric of corruption, and establish upon its ruins the rights and privileges of the people." *In like manner, give the catholics of Ireland their emancipation; give them a seat in the parliament of their country; give them a free and equal participation in the politics of the realm; give them a place at the right ear of majesty, and a voice in his councils; and give me the circulation of the Bible; and with this mighty engine I will overthrow the tyranny of anti-christ, and establish the fair and original form of christianity on its ruins.* The politics of the question I have left to other and abler hands. I view it only in its religious bearings, and I give it as my honest conviction, and I believe the conviction of every true-hearted protestant who knows wherein it is that the great strength of his cause lies, that we have everything to hope and that we have nothing to fear from this proposed emancipation.

These splendid sentiments, these sound arguments, were delivered to an Edinburgh auditory, in the year 1829.

And yet the utterer of these sentiments is *now* converted to a persecutor. He *now* sanctions the very practices which he then denounced. He now is a supporter of a church, the ministers of which imprison the inhabitants of Edinburgh, because they will not pay an annuity tax to support a *creed* and *ceremonials* of which they disapprove.

How are the mighty fallen! What, then, is Dr. Chalmers now? *He is Professor of Divinity in the University of Edinburgh.*

But his present opinions the next Number will declare.

ADDRESS TO THE ANTHROPOLOGICAL SOCIETY, BY JOHN ISAAC HAWKINS, JUNE 23, 1836.

MY DEAR FRIENDS,—This being our first meeting after the definitive confirmation of the laws of this Society, and the appointment of officers to administer those laws, I feel it my duty, as your first president, to state the characteristics of this Society, as distinguished from the Phrenological Societies which have preceded it, and to point out the peculiar duties which those characteristics demand of us.

Our duties will be developed by a careful analysis of the fundamental resolution; by reference to the etymology of our name; and by a serious examination of the objects of the Society, as declared in the third rule.

My observations, therefore, may usefully assume the form of a commentary upon the first three rules of our constitution, which three contain all that is peculiar thereto; the rest being common to the rules of other societies.

The "FUNDAMENTAL RESOLUTION" is, "*That it is desirable to establish a Society of persons believing in the fundamental*

principles of Phrenology, for the purpose of investigating the laws of the Creator in reference to the condition of man."

This Society is established, then, for the purpose of investigating the laws of the Creator in reference to the condition of man: the investigation to be pursued according to the fundamental principles of Phrenology.

Now the acknowledged fundamental principles of Phrenology are:

1st. "That there is a correspondence between the form of the head and the manifestations of the dispositions of the mind."

2nd. "That the science of Phrenology results from the orderly arrangement of a multitude of observations of such correspondence, and from profound reflection on the same."

We are, therefore, constituted to bring to bear upon these fundamental principles of Phrenology, every law of the Creator which refers to the condition of man.

But *every* law of the Creator refers, more or less, to the condition of man; consequently, we are entitled to borrow light from every law of the Creator to illustrate the science of Phrenology.

The laws of the Creator are two-fold: Spiritual and Natural: therefore it is clearly within our province to investigate the spiritual laws of the Creator as well as the natural, in respect to their bearing upon the science of Phrenology.

Here, then, becomes manifest the distinction between "The Anthropological Society," and those Phrenological Societies which have preceded it.

The Phrenological Societies have, for the most part, taken their stand upon the observation of external appearances, and the results to be obtained by induction from such appearances; and so far as this goes it is good, being a great advance in the region of natural science.

But some of those Societies refuse the aid of spiritual science, and thus limit their progress to the nether or shaded side of creation, acquiring only a view of the external condition of man, and imagining that the internal is beyond their ken.

The "Anthropological Society," on the other hand, while it grasps all that Phrenology affords as commonly understood, seeks also to be illuminated by the light of Divine Revelation, and thus endeavours to obtain a view of the internal condition of man, as well as the external: the spiritual as well as the natural powers of man are thus seen to be the legitimate objects of our inquiry.

This Society requires quite as diligent observation, and as severe induction, as any Phrenologist could contend for: but it limits not itself to mere natural observation, nor to mere natural induction, because it admits that there is such a thing as spiritual observation and spiritual induction, and these exist in a region within or above the natural, constituting, in fact, the soul, and spirit, and life, of the natural.

We, therefore, take the soul and body as a living guide, instead of hanging on upon the body alone, which, without the soul, can yield no other than dead science.

Spiritual observation and induction will enable us to perceive that the soul acts on and in the body as a family act on and in a house,

or as a party of manufacturers act on and in a manufactory; and that the body no more acts on the soul than a house acts on a family, or than a manufactory acts on the manufacturers. The manufactory does nothing but yield a passive obedience to the manufacturers; the house does nothing but yield a passive obedience to the family; and the body does nothing but yield a passive obedience to the soul.

Those Phrenologists, therefore, fall short of any spiritual view, who derive the soul from the organization; or, who confound the soul with the organization.

From spiritual observation and induction it may be perceived, that the bodily organization is derived from the soul, which is itself a spiritual organization. This spiritual organization of the soul is, of course, visible only to the spiritual eye, the eye of the mind. The operations of the soul in and by its instrument, the body, being visible only to the bodily eye.

Time will not allow us, on the present occasion, to bring forward illustrations of these statements, but should any one not be prepared to go thus far, it will be well for him to observe closely, and to ponder the subject deeply, before he ventures to come to a negative conclusion.

The Phrenological Societies, in general, imagine themselves limited to the observance of cerebral development in comparison with mental manifestation; "The Anthropological Society" feel liberty to inquire into the *origin* of mental manifestation, which, as it belongs to a world *above* nature, requires supernatural investigation of supernatural evidence.

Our second rule, under the head of "Name," is, "That this Society be called The Anthropological Society."

In looking, etymologically, into the name of the Society, we find it composed of two Greek words: *anthropos* and *logos*.

Anthropos signifying *man*, *mankind*, as composed of male and female. *Logos* meaning a *word*, a *discourse*, or a *treatise*.

"Anthropology," therefore, is a word, a discourse, or a treatise concerning man.

The Anthropological Society then, by virtue of its name, possesses the right of entertaining every subject relating to man.

Our third rule, under the head of "Objects," is, "That the objects of the Society are, the application of the principles of Phrenology in the elucidation of the laws of the Creator, as evidenced in the animal, intellectual, moral, and religious condition of man."

From this rule, it appears that this Society has higher duties to perform than are pretended to by Phrenological Societies in general, who, as Societies, limit themselves to the consideration of the animal, intellectual, and moral condition of man; while we ascend higher in the scale of existence, and contemplate his *religious*, in combination with his moral, intellectual, and animal condition. Hence it will be seen that the "Anthropological Society," as it occupies higher ground, and has a more extensive field of observation, has proportionably more important duties to perform.

By religion we ought not to understand sectarianism, or the spirit of stickling for any particular creed; but we should understand the only true religion, which is the love of God and neigh-

bour, declared by our Saviour himself to be the whole and sole teaching of the law and the prophets; that is, practical religion, in contradistinction to merely doctrinal sentiments.

Now if we analyse any religious system, however absurd it may appear on superficial observation, we shall find the inculcation of this fundamental teaching of the law and the prophets in some form or other.

The serious consideration of this fact, will tend to disarm us of our sectarianism, and to generate a spirit of mutual forbearance in respect to our peculiar notions, leading us to unite and co-operate, under the influence of the grand ruling principle of love to God and neighbour, in every way we can, in the promotion of all that may operate beneficially towards the advancement of man.

These considerations are rendered necessary, by the circumstance of this Society being composed of persons possessing almost every general creed of christianity, amongst whom, if sectarianism were allowed to rear its head, dissension would be inevitable, and the bond which should unite us, would be endangered if not destroyed: at least it would render a smooth and successful course impracticable. We must, therefore, draw largely upon the spirit of liberality, if we would promote the comfort and secure the permanence of the Society.

Mutual forbearance will elicit a hundred-fold more of truth than can possibly arise out of any form of contention. The endeavours at proselyting are productive of more obstinate blindness, and adherence to error, than most people seem to be aware of.

Phrenology suggests to us the charitable consideration, that each peculiar creed may be, under the leadings of Divine Providence, the best possible system of doctrine according to which the peculiar organization of its professors can be cultivated, and rendered prolific, to the highest degree of their respective susceptibilities, of love to God and neighbour.

The real worship of God, consists not in mere adoration, but in the doing of our duty in that station of life in which it has pleased God to place us, not from selfish motives, but from the principles of love to God and neighbour.

Constituted as this Society is, it will be particularly necessary for every member to guard his expressions, in order that he may not do violence to the opinions, prejudices, or feelings of his fellow members. And it will become my duty to watch strictly the rising of the spirit of proselyting, or of enforcing dogmas, and I shall claim your support in checking debate, as soon as it shall offer the least shade of offence to the professor of a creed differing from that of the speaker.

Cherishing the spirit of mutual forbearance in our investigations, being willing to hear all things, holding fast, without forcing on others, that which we feel to be good; ever desirous of contributing our share to the common stock of information and good feeling; we shall not fail to promote the utility, and the permanence of the Society, or to render it eminently instrumental in advancing the animal, the intellectual, the moral, and the religious condition of man; and in removing the stigma which the avowed scepticism of some of the professors of Phrenology has brought upon the science.

Fig. 1

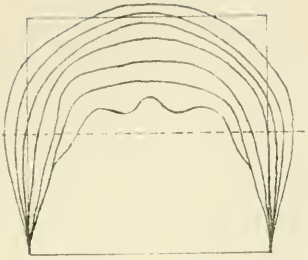


Fig. 2

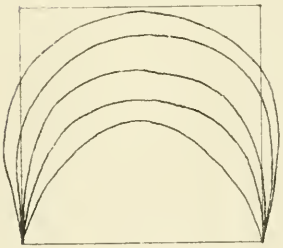


Fig. 3

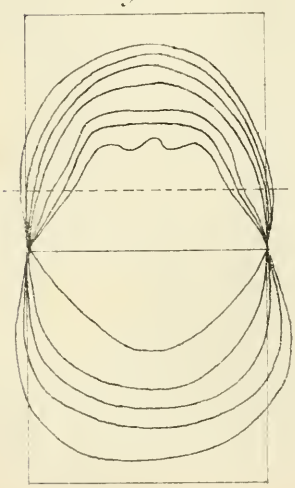


Fig. 4

Fig. 5

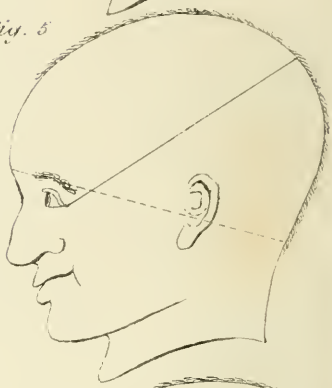
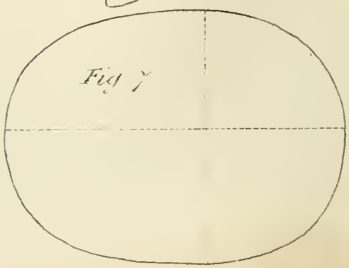


Fig. 6

Fig. 7



THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[*ανθρωπος*, anthrōpos, *man*, and λογος, logos, *a discourse*.]

AUGUST 1, 1836.

ADDRESS TO THE READER.

To say that we feel no pleasure in concluding this volume, (this being the last number of the first volume,) would be asserting what would by no means express the state of our mind.

Looking back, as we do, upon the various subjects which have occupied the pages of the Magazine, we consider that the objects proposed have been, in some measure, gained. Many attempts have been made to prove that much of man's misery is clearly traceable to his deviation from the laws which the Creator has appointed for the regulation of the universe, whether as to its physical, moral, or religious relationships. This has been successfully shown in reference to the fact, that so many human beings are destroyed every year by the operations of a society that we had the honour of naming, "The Drowning-at-Sea Society."

And, in reference to this subject, we have the pleasure to state, that *Parliament* have taken the iniquitous system, patronized by that society, under their notice: and, that, on the motion of Mr. Buckingham, a committee has been appointed to investigate the causes of so many shipwrecks, and whether means may not be devised to prevent such wrecks in future.

Mr. Ballingall, to whose Essay on Sea Burking, in *Tait's Magazine*, we are indebted for the first direction of our mind to the subject, has been examined before the committee, and gave, notwithstanding the attempts of certain ship-owners to invalidate his statements, the most convincing evidence both as the iniquity and the monstrosity of the present system, and as to the ease with which the evils referred to might be prevented in future. We hope to have the pleasure of detailing more fully the particulars of this parliamentary investigation; and surely we may feel some satisfaction that, *even in the year* in which the evils of the Drowning-at-Sea Society were exposed within the pages of this Magazine, the *remedy* is likely to be devised: or, if not this, the *existence* of the evil is likely to be recognized by parliamentary authority.

In regard to the Essays on the Human Body, and the *functions* of those parts which have been under consideration, we have the satisfaction of knowing, that many have expressed the pleasing conviction, that they have learned more of the true character of these parts and of their uses, by reading these Essays, than by reading lengthened accounts in the pages of Encyclopedias.

In regard to the exposé of the system of Corn Laws, in the Numbers for October and May, much valuable information has been embodied in the pages of the Magazine: and little doubt can exist that years hence, the views developed in these pages will be held almost universally. Light is spreading fast. Men will allow dust to be thrown in their eyes not much longer. Men will not allow man to make dear what God has made cheap.

We would particularly recommend for repeated reading the Essay in the November Number, entitled The Injustice and the Impolicy of Freeing any class of Society, more particularly the Clerical, from its Share in Providing for the Wants of the State: the Essay in the January Number, entitled The Necessity of Discussion on All Subjects with the view of arriving at Truth, by W. H. P.: the Essay on The Repeal of the Taxes upon Knowledge, embodying the splendid speech of John Milton, on the Liberty of Unlicensed Printing, to be found in the April and May Numbers: the Essays on The Curvature of the Spine, and the miseries arising therefrom, and the remedy for that Curvature provided by Harrison's Spinal Infirmary, to be found in the June Number: and finally, The splendid Speech of Dr. Chalmers on Catholic Emancipation, delivered before his mighty soul delivered itself wholly up to the embrace of the ugly monster of religious despotism. To these we particularly call attention, and feel quite satisfied that those who read these Essays will feel themselves better and nobler after the perusal: the best evidence that these Essays are good.

This volume may serve as a specimen of what the next is to be. It shall not be inferior.

In concluding, we remark that the present Number contains the concluding Essays on the *Principles of Phrenology:* and any person who possesses the whole volume will have a complete epitome of all that is known in regard to the general truths of this interesting science.

AMERICAN INHUMANITY. VIOLATION OF JUSTICE.

Extract from a Letter, dated April 28, 1836, *at St. Louis, Missouri, United States. Published in the Boston Evening Gazette.*

"I have just returned from witnessing the most horrid sight; viz. the execution of 'Lynch law,' upon a 'yellow fellow,' *by a slow fire.* The cause was; Deputy Sheriff Hammond, while endeavouring to arrest an offender, was, by the above mentioned 'yellow fellow,' defeated in his intent. The prisoner escaped; Mr. Hammond arrested the 'yellow fellow,' took him before a magistrate, who committed him. While conducting him to gaol, the prisoner stabbed the constable; which Mr. Hammond witnessing, sprang at the prisoner, and received a mortal blow. The prisoner fled, but being impeded in his escape, threatened the life

of any one who touched him. At length his arm was dislocated by a stone thrown, and he was carried to prison.

"The mob collected: swore that the prisoner should not live another hour: broke open the gaol, and led forth the prisoner, amid the shouts of the multitude.

"The mob conducted the murderer to a pasture at the back of the city, with the intention of hanging him, but some among them cried out 'Burn him!' The horrible suggestion was immediately caught at. The moon had now risen bright, and clear, the evening was calm and beautiful, too fair a night for a spectacle that was about to be witnessed by at least *five hundred of our most respectable citizens!* They chained the murderer to a tree, and the cry arose '*Let the fire be slow!*' They piled shavings and rails round him, until they reached about two feet and a half; a match was applied to the shavings, and the *murderer commenced singing a hymn*, which he continued until the heat became intense, and then these few half smothered words escaped, 'God take my life.'

"Not a single scream escaped him: his chest heaved with the most intense agony, and yet all he said was 'God take my soul! God take my life!' He had been burning *about fifteen minutes* when some one said, 'he feels no pain, he is too far gone.' He immediately answered, 'Y—e—s I d—o f—e—e—l i—t.'

"The fire was so low, that his legs and feet were burnt almost to a cinder before his other parts were to any degree affected.

"The horror of that scene can never be effaced from my memory. Imagine a human being chained to a tree: a slow fire burning around him; the boiling blood gushing in torrents from his mouth; his legs burnt to a crisp, yet his head moving from one side to the other, and occasionally a half-uttered groan."

And this in America! The land of freedom! The land whose constitution declares that all men are equal! Barbarous fiends: you five hundred respectable citizens deserve to come under the Lynch law of some Caligula, who understands freedom as well as yourselves. You talk of freedom, indeed! It is a mockery against heaven! It is a most damnable hypocrisy on your parts. Your five hundred respectables' freedom is to insult black men: rob them of the fruits of their talent and industry: goad them to acts of madness, and then *burn* them! Aye, *burn* them for their acts. And yet you talk of freedom! Hide your heads, ye blood-thirsty fire-loving respectables of St. Louis; and remember that this fact shall ever stand recorded on the historic page, as evidence of the barbarism of yourselves in the nineteenth century: as evidence that men professing civilization are cannibals in heart, and despots in practice. Your retribution is sure to come. The hand of agonized and oppressed humanity shall avenge itself, (such is the necessary order in human progress), on your heads; and though 'yellow fellows,' as you insultingly call them, will not perhaps convert you into crisps, yet you shall feel all the humiliation that your professed belief and hypocritical pretence of superiority over them, will make you feel, when the oppressed shall put their feet

upon your necks, and ask *where now are the oppressors?* Your punishment *must* come, prepare for it. Insulted humanity's avenging cry shall disturb you in your sleep, ere many years roll by, and then your bloody deeds will array themselves before you; and in one moment your agony will be that produced by the contemplation of all the atrocious villanies that you have committed on 'yellow fellows,' who then shall teach you the lesson you profess to understand, that *all men are equal;* a conviction, however, to be gained by you only when the 'yellow fellows' have trod on your neck.

PARLIAMENTARY CONSCIENTIOUSNESS.

In the first number of the Magazine, the attention was directed to an exhibition of the different amount of conscientiousness possessed by different members of the House of Commons. The circumstance which developed the manifestation of the respective conscientious feelings on the part of the members, was the case of captain Acheson, who had been dismissed from his Majesty's service, because he would not fire a salute in honour of some Romish ceremonial at Malta.

On that occasion Mr. O'Connell advocated the cause of captain Acheson. It is curious that before the conclusion of this volume we have to report progress again here.

The subject was brought before the attention of the House of Commons on the 5th of July, 1836, when Mr. Plumptre moved for an address, praying his Majesty, that his subjects in the civil and military services abroad may be relieved from assisting in religious ceremonies to which their own tenets are opposed.

The motion had many supporters, though it was lost: *thirty-eight* being for it, *forty-four* being against it. Seven more votes would have established a grand principle. Mr. O'Connell, as usual, advocated the address, stating that as he, as a catholic, should not like to be obliged to perform duty as a soldier in any protestant religious procession, so the protestant soldier ought not to be obliged to perform duty in honour of a catholic ceremonial.

Progress in just opinions is making.

CLERICAL CONSCIENTIOUSNESS.

The Association (misnamed) Protestant, held a meeting at Exeter Hall, on Thursday, July 14, 1836, for the purpose of exposing the Errors of Popery. The principal speaker was a person entitled R. M'Ghee, a clergyman of the Church of England, a man, entitled by *law* to the title of Reverend.

This individual, to establish the evils of popery, read a letter from pope Gregory XVI. to the catholic clergy of Ireland, in 1832,

recommending them a most horrible course of jesuitical cunning towards the heretics. The effect of this letter upon the audience was immense. And yet this document, put forth as genuine, as authentic, turns out to be, even according to M'Ghee's own statement, "an ingenious device, resorted to by a learned friend, for bringing most important truths before the protestants of this empire."

And this man stood up at the meeting, at Exeter Hall, and represented himself as a christian minister, who stood as invulnerable to the attacks of *falsehood* and *malice* as the rock which rose above the waters, and against which the waves, having beaten in vain, at length sunk in a state of impotent exhaustion.

And this man further has the audacity to make God a party to his lie. Speaking of some documents and the letter he states, "it was *through Providence alone* that they came into my hands. And this most important paper (the letter of the pope) has been intrusted to me by the *instrumentality* of the same Providence."

This man, instead of being a follower of Christ, is a follower of the devil: for Christ himself said, That the devil was a liar from the beginning.

For such a man as this to talk about jesuitical cunning, one principle of which is, that *the end justifies the means*, is astounding.

He is an evidence of the old truth, that those who are bad themselves think others so. Why, he would be the best jesuit imaginable: we should recommend him at once, were it not an insult, to the pope.

THUS IS TRUTH INJURED BY ITS ADVOCATES BEING EITHER KNAVES OR FOOLS.

HUMAN HAIR—*Violations of the Laws regulating its preservation. Dyeing the Hair. Curling the Hair.*

THE part of the human body, known as *hair*, was described in noticing the skin. It was in that notice stated that a certain quantity of oil is secreted for the purpose of preserving the hair, and giving it that degree of elasticity and cohesiveness so essential to its beauty.

It is quite evident that any method by which this oily secretion is taken away, or altered in its character, must be injurious.

Many individuals, who are approaching old age, but wish to be thought young, take great pains to remove any indications that age has extended his influence over them. The chronicles of hair-dressers would afford some most striking evidences of human absurdity. Perhaps no evidence of this, more suitable to the subject, than that practice had recourse to to remove the testimonial of age, namely, *dyeing the hair*, could be brought forward.

The particulars of this process may now be stated as communicated by a very intelligent hair-dresser.

The present method of DYEING THE HAIR consists of the following

steps. The head is well washed so as to free the hair entirely of grease: for this purpose very often a strong alkaline soap is used.

The hair is then well covered all over, every interstice being filled with the *dye*, which is a preparation consisting of *lime* and litharge, made with water to the consistency of mustard.

This coating of a burning body, lime, mixed with litharge, is allowed to remain on the hair for five or six hours, the head being enveloped in an oil-skin cap.

When dry, the hair requires to be well brushed, and thoroughly cleansed of every particle of dye. This process is very irritating; for the dust being abundant and very fine, the eyes both of the operator and the operated upon are filled.

This operation requires, moreover, to be repeated every four or five months, to keep the hair of the required colour.

Should any water or oil be applied before the hair is thoroughly freed of the dye, a paste or plaster is formed; from which the most offensive smell arises. The removal of this paste is attended with great pain and trouble.

Notwithstanding all this, I have known ladies from sixty to seventy years of age undergo all that has been described, for the sake of enabling themselves to be persuaded that they were younger in appearance on account of the change of the hair from the colour which nature intended it to be.

To show the strong desire existing in reference to this love of juvenility in appearance, the following cases are worthy of record.

A lady, about five or six years ago, came to me from Hammersmith, about twelve in the morning, to have the dye applied. At six she returned to have the dye removed; having had her head in a wet *poultice of lime and litharge* for six hours. And, for what? To go in her metamorphosed state to a party in the evening.

Very often this dyeing produces sore eyes for years afterwards. One lady, who cannot sleep from the intolerable heat of her head, when she has the dye applied, continues to subject herself to the treatment, so strong is her love of the indications of youth.

The dye being prepared with lime is very apt, unless prepared and applied properly, to injure the skin. One lady to whom I was once called, had her head covered with, as it were, a complete blister.

Though the fair sex give way to this vanity, the *male sex* are not entirely free from it. I have known many whose whiskers have been red, purple, and often blue, from an improper method of using the dye. A gentleman with very *light red* hair applied to me to have it dyed black. It was done: and, when finished, the contrast between his black hair and fair complexion, was so great, that any one would have believed he had just risen from the dead, so ghastly were his looks.

Besides the dye described, there is a liquid dye, composed of *nitrate of silver* and water. This discolouring the *skin*, as well as the *hair*, is not so much used as the powder dye: though many an unlucky wight, ignorant of its properties, has, in applying it, so

stained his forehead and face *as to be obliged to be ill for several days*, and be confined at home; a mortification the more galling, because he most likely had recourse to the dye to obtain the smiles of some fair one at a party, for the duties of which he was preparing himself.

Another violation to which the hair is subjected, is the perpetual application of *heated irons*, so as to *curl it*.

The curling of the hair is necessarily attended with a partial destruction, because the curl itself is dependant upon the contraction of the tissue of the hair, so as to make it assume the particular form. This process, frequently repeated, must injure the hair, and there can be little doubt that premature baldness is induced.

A hair-dresser, resident in the neighbourhood of some of our courts of law, informed the writer of this Essay, that he sometimes curls the same youth three times a day. I asked him how he could do this conscientiously. He answered, that he thought it did not *injure the roots*.

It is quite evident, as the hair is a *perspiratory* organ, being a prolongation, in certain senses, of the skin, that this alteration in its structure, must tend to impede the perspiratory powers so far as the head is concerned; and thus head-ache, and other inconveniences, are produced.

Such, then, are some of the evils resulting from the abuse of the hair. On some future occasion, *frontages and wigs* may be brought under consideration.

PHRENOLOGY, BY JOHN EPPS, M. D.

Essay XII.

The last organ belonging to the *animal propensities is*

That of Amativeness.*

The situation of this organ is easily recognized. It occupies the part of the back of the head, below the ridge which runs horizontal with the little projecting point referred to in the description of the site of philoprogenitiveness. When large, it produces the appearance commonly called bull-necked.

The organ of this particular feeling is, as it were, a separate brain. It is called the *cerebellum*. It is separated from the brain, called the *cerebrum*, constituting the organs already described, by a *membrane*, which is inserted on the inner surface of the skull into a ridge correspondent to the external ridge just referred to.

The fact of its *separation* from the rest of the brain is interesting, and may lead to some important conclusions. These may be noticed on another occasion.

There is another fact connected with this organ, which is its

---

* Marked No. 1.

relative size. It is large in reference to the other organs of the brain.

Another fact connected with this organ is, that it is larger in the male than in the female: with which fact also some conclusions are connected.

Wherever sexes exist this organ exists.

The feeling given rise to by this organ is that of *sexual desire.*

Hippocrates was aware of this desire being dependant upon cerebral organization.

The organ, in its functional activity, is perfectly blind. It gives the impulse whenever the objects, suited to call it into activity, are present. And if no other organs existed in the human brain, vice could not be attached to its gratification. But there are other organs, and as this is the lowest organ in situation, the reflecting mind is taught the necessity of keeping its activity continually under the influence of the higher feelings; and, at the same time, is convinced of the part which this affords to the foundation on which society, as composed of a succession of individuals, is dependant.

Much has been surmised as objectionable to this feeling: whereas, the Creator himself recognized it when he commanded the first parents of the human race, "Be fruitful and multiply, and replenish the earth:" a command which he repeated to Noah, when leaving the ark to descend upon a depopulated world.

This organ is to be viewed as productive of the feeling essential to the ensuring that condition of the human being, necessary for the production of his kind.

As the organ of physical love, it is the groundwork of some exalted fabrics, domestic, moral, and intellectual. It affords a soil, which, if cultivated in accordance with the arrangement of the faculties as depicted in the human head, will produce the most genial fruits: if neglected, and directed by the other animal feelings, will produce the most horrible weeds.

To the existence of this organ is to be ascribed that peculiar sympathy, which no one can define, but which every one feels, existing between the sexes. Some may associate with this sympathy impurity, but there is a sympathy between the sexes quite independent of impurity: a sympathy, which makes the man instinctively recognize the woman as woman, and the woman the man as man: quite independent of the physical manifestation of the sexual difference in each.

Dr. Thomas Brown gives a beautiful and an accurate description of the influence of this feeling in its proper activity.

"In considering the influences of this relation on human happiness, we are not to have regard merely to those emotions which are excited in the individuals who feel that exclusive delight in each others society, and that reciprocal admiration and confidence, the charm of which constitutes the moral part of what is called love. These feelings, indeed, are truly valuable in themselves, as a part of the happiness of the world, and would still be most valuable, even though no other beneficial influence were to flow from them. But precious as they are in this respect, we are not to regard them as

extending only to the individuals themselves, and beginning and ceasing with their enjoyments. The chief value of this relation is diffused over all mankind. It is to be traced in that character of refinement which it has given to society, and with which love extends its delightful and humanizing influences, even to those who may pass through life, without feeling its more direct and immediate charms. It is in this respect, like that sunshine which even the blind enjoy, in the warmth which it produces, though they are incapable of distinguishing the light from which it flows.

"The system of gentler manners once produced in this way, may diffuse the influence in a great degree without a removal of the cause which gave rise to it; and yet, even at present, when men live long together without much intercourse with the gentler sex, we are soon able to discover some proof of the absence of that influence, which is necessary not only for raising man from savage life, but for saving him from relapsing into it.

"That the female character, however, may have its just influence, it is necessary that the female character should be respected. When woman is valued only as subservient to the animal pleasures of man, or to the multiplication of his race, there may be as much fondness as is involved in sensual profligacy, there might be a dreadful mixture of momentary tenderness with habitual tyranny and servility; but this is not love, and therefore not the moral influence of love—not that equal and reciprocal communication of sentiments and wishes

> "'When thought meets thought ere from the lips it start,
> And each warm wish springs mutual from the heart.'"
>
> Pope.

To develop this peculiar sympathy, to improve this hallowed feeling, it is clear that woman should seek to be woman, and man to be man: woman not to be a white negro, to be the slave of the man, but to be a being who has all the same powers as the man; preponderance existing in reference to the domestic feelings, which, receiving a direction from the cultivated intellectual powers, will impart a truly classic beauty to those refined associations connected with the domestic circle, that will again realize the picture of the poet, who represented even Eden as a wild, until the lovely woman smiled.

The existence of this feeling affords presumptive evidence against the practice of celibacy; since celibacy is evidently a violation of this faculty.

It is true, many individuals may decide to live alone, as well as to live not united with an object of affection belonging to the opposite sex; and such decision may have been induced by the highest motive. Still they have submitted to a violation of a feeling, which is natural, because, in the condition of society existing in regard to them, they could not fulfil a higher duty in attending to this, a natural one. Thus, an affectionate daughter may, out of regard to the happiness of an aged parent, nobly resolve to sacrifice the gratification connected with this feeling, in order that she may be

enabled to continue that care and that tenderness to her parents, which she, in a married state, might not be able to supply. So with a son in reference to his mother.

But a life of celibacy is maintained as a principle by the Romish clergy. Such a dogma is a curse to society, and it may be well to examine it.

The existence of the organ of amativeness at once demonstrates its unnaturality. If our feelings had originated in the influences of education, if they were producible and preventible by education, then some excuse might be obtained for a celibatic life. But as phrenology demonstrates that there is a feeling of physical love: a feeling, demonstrated to exist by a physical organ, it, at the same time, proves that such a dogma, as, that men ought, as a body, to live a celibatic life, is false.

All false views are injurious: and, as an evidence, the fact stands prominent, that never were greater vices, in reference to the abuse of this feeling, committed by any body of men, than those by the Romish clergy. The very circumstance of professing celibacy induced the unsuspecting to make, at the confessional, acknowledgments which otherwise they would not, and thus craft obtained materials by which to effect the basest purposes.

And it is quite easy to understand why this celibatic state should be productive of such evils. To be a true celibatic, the feeling connected with the organ under discussion must be destroyed. If it be not, it will strive to gain activity: and finding all the legitimate avenues shut, it must necessarily seek other avenues. Vice must prosper under such restraints: stolen waters are sweet.

And hence can be explained the consentaneousness of appearance of nunneries with monasteries.

The nunneries, every person who has read the history of France before the first French Revolution, must be aware were the *libertinage mansions of priests.*

It is true much may be said in favour of these institutions, although all the arguments for them may be easily overturned. Yet the one argument, the existence of the organ of physical love, at once overturns every argument, however apparently well founded.

It is true that men exist who are so deficient in this feeling, that they may be said to be "eunuchs from the womb." Such men cannot judge of men as commonly organized in reference to this organ, any more than an individual with deficient ideality, can judge of the state of mind of an individual endowed with large ideality.

Such, then, is a brief abstract of the various organs which the labours of phrenologists have discovered. Such are the functions which have been attached to these organs: and being such, it is hoped, that an acquaintance with the same will be attended with those uses, which the old saying, that "self-knowledge is the highest of all knowledges," implies ought to be connected therewith: those uses, the importance of which is exhibited in the fact, that the philosopher who gave birth to the saying, "know thyself," was reckoned among the wise men of Greece.

ADDRESS TO THE SKELETON IN THE ROYAL ACADEMY.

The following lines were found deposited in the case containing the skeleton, at the Royal Academy. It is believed that they were written and deposited there by one of the students.

" Behold this ruin! 'twas a skull,
Once of etherial spirit full;
This narrow cell was life's retreat;
This space was *thought's* mysterious seat.
What beauteous pictures fill'd this spot,
What dreams of pleasure long forgot!
Nor love, nor joy, nor hope, nor fear,
Has left one trace or record here.

" Beneath this mouldering canopy
Once shone the bright and busy *eye;*
But start not at the dismal void,
If social love that eye employ'd;
If with no lawless fire it gleam'd,
But through the dew of kindness beam'd,
The *eye* shall be for ever bright,
When stars and suns have lost their light.

" Here, in this silent cavern, hung
The ready, swift, and tuneful *tongue;*
If falsehood's honey it disdain'd,
And, where it could not praise, was chain'd;
If bold in virtue's cause it spoke,
Yet gentle concord never broke;
That tuneful tongue shall speak for thee,
When death unveils eternity.

" Say did these *fingers* delve the mine,
Or with its envied rubies shine?
To hew the rock, or wear the gem,
Can nothing now avail to them;
But if the page of truth they sought,
Or comfort to the mourner brought,
These hands a richer meed shall claim,
Than all that wait on wealth and fame.

" Avails it whether bare or shod
These *feet* the path of duty trod?
If from the bowers of joy they fled,
To soothe affliction's humble bed;
If grandeur's guilty bribe they spurn'd,
And home to virtue's lap return'd;
These feet with angel's wings shall vie,
And tread the palace of the sky."

A CONSTANT READER.

PHRENOLOGY, BY JOHN EPPS, M. D.

Essay XIII.

Besides the knowledge of the organs and their functions, it is necessary, for the formation of a correct phrenological judgment, to attend to other matters. It is necessary to be aware of the differences between intensity and power of action, already pointed out in the third Essay: and, as intimately connected with the differences referred to, the doctrine of TEMPERAMENTS requires investigation.

To understand this doctrine is more particularly necessary, because so many of the intellectual, moral, and animal tendencies have been ascribed to the temperaments, that, it would seem, from the observation of some acute-minded men, that the differences in temperament constitute the causes of all the differences in character among mankind.

To avoid the error of ascribing too much, and the equal error of ascribing too little, to the temperaments, it seems advisable to make them, on the present occasion, a concluding subject of investigation.

Every human being is composed of the same parts, allowing for the difference in the sexes: yet no two human beings exactly agree. The features are different; so, that, while each person has the same organs, he has, at the same time, some circumstances modifying each organ. These modifications constitute his individuality.

In regard to the *general* constitution, general modifications exist: and these general modifications are called *temperaments*. In other words, take four healthy men, the parts of their bodies are in the conditions essential to health; and in this respect they all are alike; but yet each man has these parts modified by constitutional conditions.

Such modifications are now to be considered. They are generally regarded as four, the

Sanguineous;
Melancholic;
Choleric or bilious; and
Phlegmatic.

The indications of these, individually, may now be pointed out: it being remembered that these terms were given on account of the notions entertained by some of the ancients respecting the effect of the state of the fluids on the disposition: in reference to the bile, melancholic meaning *black bile:* choleric, yellow bile: and in reference to the blood, the term sanguineous occurs.

Blumenbach remarks, the sanguineous is excited most readily, but slightly; the choleric, readily and violently; the melancholic, slowly but permanently; and the phlegmatic, most slowly, indeed, with difficulty.

The *habit:* of the sanguineous is full; of the melancholic, spare;

of the choleric, between the two; of the phlegmatic, lax, often plump.

The *skin:* of the sanguineous is delicate, and fine in texture; of the melancholic, dark and hairy; of the choleric, between both; of the phlegmatic, pale and destitute of hair, often thick.

The *hair:* of the sanguineous, light and varied; of the melancholic, black, and eyes also: of the choleric, between; of the phlegmatic, very light upon the head.

The *pulse:* of the sanguineous, quick; of the choleric, quick and strong: of the melancholic, slow: of the phlegmatic, slow and weak.

The *fibre:* of the sanguineous, soft, with large veins; of the choleric, less soft; of the melancholic, firm; of the phlegmatic, weak.

The choleric or bilious temperament, seems to be most intimately connected with the attainment of first rate excellence.

To these temperaments the *nervous* may be added.

This is associated with great activity of the mental powers: an activity not attended, however, with continuance. Individuals of a nervous temperament, have great susceptibility of excitement. The characteristics of this temperament, as given by Mr. Noble, are "a soft skin: fair and thin hair: sometimes a paleness of the complexion, and sometimes a hectic tinge: small and soft muscles: delicacy of the whole organization: generally a slenderness of form: a sparkling vivacity of the transparent part of the eye, and a quick sharp pulse."

Henry Kirke White, Mr. Noble refers to, as a striking instance of this temperament.

Precocious children belong to this division. They are soon excited to action: foolish parents favour this easy excitation: they die, and then the parents are consoled because they *were too good for this world:* whereas the fact is, that the folly of parents prevented them living to do good in this world.

These temperaments, though occasionally presented distinct, are generally more or less connected together. The sanguine is most frequently mixed with the bilious, the bilious with the nervous, and the sanguine with the lymphatic.

From these statements it will not be difficult to judge, how far these temperaments are influential. The error in connection with their influence, is, that they have been supposed to produce *dispositions and intellectual powers*, and not merely the MODES OF ACTIVITY *of dispositional tendencies*, and of *intellectual power*.

This notice of temperaments may be concluded by a description, referring to the choice of a wife, by a writer who possessed a great command of the English language. "Who is to tell whether a girl will make an industrious woman? How is the poor blind lover especially to be able to ascertain whether she, whose smiles, and dimples, and bewitching lips, have half bereft him of his senses: how is he to be able to judge, from any thing that he can see, whether the beloved object will be industrious or lazy? Why, it is very difficult," he answers. "There are, however, certain outward

signs, which, if attended to with care, will serve as pretty sure guides. And, first, if you find the *tongue* lazy, you may be nearly certain that the hands and the feet are the same. By laziness of the tongue I do not mean *silence:* I do not mean an *absence of talk*, for that is, in most cases, very good: but I mean a *slow* and *soft utterance:* a sort of *sighing out* of the words, instead of *speaking* them: a sort of letting the sounds fall out, as if the party were sick at stomach. The pronunciation of an industrious person, is generally quick and distinct, and the voice, if not strong, firm at least. Not masculine: as feminine as possible: not a croak or a bawl, but a quick, distinct, and sound voice." "Look a little, also, at the labours of the *teeth*, for these correspond with the other members of the body, and with the operations of the mind, 'quick at meals, quick at work,' is a saying as old as the hills in this, the most industrious nation upon earth, and never was there a truer saying." "Get to see her at work upon a mutton chop, or a bit of bread and cheese; and if she deal quickly with these, you have a pretty good security for that activity, that stirring industry, without which a wife is a burden instead of a help." "Another mark of industry is a *quick step*, and a somewhat heavy tread, showing that the foot comes down with a hearty good will." "I do not like, and I never liked, your sauntering, soft-stepping girls.'"*

It is to be remembered, therefore, that the temperament does not produce the dispositional tendencies; temperament modifies manifestation.

Another circumstance, to be taken into consideration in forming a phrenological judgment, is the influence of education and of external circumstances. The positive influences of these upon organization, and activities of the faculties, will be considered on another occasion. It is right to remind the phrenological student, that he should keep his eye upon these in making his conclusions from any specific organization.

To help the student of character in his investigations, both in regard to himself and to others, these phrenological notices may be concluded by an Essay, by Mr. J. I. Hawkins, containing truths of the highest importance.

PHRENOLOGY. ESSAY BY J. I. HAWKINS.

On making use of certain natural fixed points and distances in the human head, in order to assist in estimating the phrenological development. Read at a meeting of the Anthropological Society, March 24, 1836;

BY JOHN ISAAC HAWKINS, PRESIDENT OF THE SOCIETY.

HAVING been requested by some of our members to read two papers to this society, which I read, under the above title, about eighteen months since, at two meetings of the London Phrenolo-

---

* Cobbett's Advice to Young Men, Letter III.

gical Society, I have used the opportunity to revise them, to combine the two into one ; omitting some points, and inserting others, so as to bring the whole into accordance with my more matured views.

Dr. Spurzheim, in his work on "Character," published in 1826, page 31, recommends, in order to assist in estimating development, that lines be drawn from various parts of the head to other parts, of which some are fixed natural points, and others uncertain places.

The fixed natural points and distances adopted by Dr. Spurzheim, the places of which can be easily ascertained in the living subject, and generally in casts of the head, are:—1. The orifice of the ear. 2. The external angle of the eye. 3. The distance from the orifice of the ear to the external angle of the eye. 4. The width of the head.

The uncertain places described by Dr. Spurzheim as a further groundwork for assisting the judgment, are: — 1. The point of union between the parietal and occipital bones, which is uncertain, because the integuments and hair frequently prevent the spot being ascertainable. 2. The middle of the forehead. 3. The length and the altitude of the line drawn from one to the other of these points. 4. The middle of the upper part of the head, which corresponds with the frontal and sagittal sutures, and. consequently, the distance from the forehead, and from the back of the head, of the line drawn from the orifice of the ear to that point.

The uncertain locality of these sutures also affects the situation of the parallel line drawn upwards from the corner of the eye. All the other lines, directed to be drawn from the orifice of the ear to various parts of the medial line, are uncertain for the same reasons.

The middle of the forehead is estimated, by many phrenologists, to be half an inch higher or lower than by others, and they vary more than that quantity in their opinions of the place of union between the parietal and occipital bones; while the situation of the frontal and sagittal sutures has been variously judged to be an inch further forwards or backwards.

Such uncertainties lead to erroneous judgments respecting the whole development of the phrenological organs of the brain.

It fortunately happens, however, that nature has afforded, besides the four directed by Dr. Spurzheim, and the profile outline and horizontal circumference, upwards of twenty other fixed points and distances, as foundations for the phrenological survey.

By making use of the whole of these natural fixed data, much greater certainty may be arrived at, than by the few heretofore recommended.

These fixed data, are:—1. The orifice of the ear. 2. The width of the head from orifice to orifice, being the length of a line which may be termed the axis of the ears. 3. The width of the head at the widest part. 4. The length of the head at the longest part. 5. The external angle of the eye. 6. The distance from the orifice of the ear to the external angle of the eye. 7. The termination of the hair at the forehead. 8. The altitudinal distance from the external angle of the eye to the top of the forehead. 9. The crown

of the head. 10. The distance, in a direct line, from the crown to the top of the forehead. 11. The distance from the crown to the middle of the axis of the ears. 12. The distance from the axis of the ears to the top of the forehead. 13. The bottom of the eyebrows over the middle of each eye. 14. The distance from the axis of the ears to the bottom of the forehead, passing through the middle of a straight line drawn under the two eyebrows. 15. The distance from the axis of the ears to the back of the neck, in the direction backwards, from the line No. 14.; Nos. 14 and 15 combined are represented by the dotted line in figures 4, 5 and 6. 16. The distance from the axis of the ears to the nearest part of the back of the neck. 17. The distance from the top of the forehead to the line uniting the lower part of the eyebrows. 18. The direct distance from the crown to the middle of a straight line drawn through the outer corners of the eyes. 19. The distance from the crown to the line uniting the eyebrows. 20. The direction from the crown to the back of the neck. 21. The greatest distance from the axis of the ears to the upper part of the head. 22. The width between the inner corners of the eyes. 23. The width of each eye. 24. The width from centre to centre of the eyes. 25. The whole width between the external angles of the eyes. To which may be added, 26. The profile outline; and 27. The horizontal circumference of the head at the largest part.

The various distances in respect to the profile, are generally to be understood as if transferred to a vertical plane, passing through all the medial organs.

The terms *altitude*, *longitude*, and *latitude*, will be used to designate development, in relation to the *height*, *length*, and *breadth* of the head.

It may be well to consider the phrenological value of each point, distance, and curve in the order here enumerated.

1. *The orifice of the ear.*—This point is quite indispensable to the formation of any judgment of the proportional development of the various organs; and hence, every phrenologist is well aware that he can make little or no progress in examining a head, without continual reference to the relative situation of this orifice. The distances from this point to each of the medial organs, indicate their comparative degrees of development; namely, the distances to those of the forehead showing the elongation of the intellectual organs; the distances from the orifice to the upper parts of the head exhibiting the altitude of the moral organs; and the distances from the orifice to the back parts of the head pointing out the elongation of the posterior region.

2. *The width of the head from orifice to orifice of the ear; or, in other words, the length of the axis of the ears.*—This width should be taken as near as possible to the anterior brims of the orifices. If a square be erected upon a line representing this distance, and, also, if curved lines be drawn from the two orifices passing around upon the head over each of the superior and anterior medial organs, representing outlines of sections through the axis of the ears and through the middle of each of those organs, a comparative

view will be afforded of the proportions of all the organs of those two regions, together with some of the lateral organs; (see fig. 1.) where direct curves over the organs of firmness, veneration, benevolence, comparison, eventuality, individuality, and form, all unite at the extremities of the axis of the ears, and show the proportion which the inclosed spaces respectively bear to the square. If another such square be erected upon another equal line, and direct curves over each of the posterior organs be applied to the same line, the comparative development of all the other organs will be shown; (see fig. 2.) where direct curves over self-esteem, inhabitiveness, philoprogenitiveness, amativeness, and the back of the neck, are laid down as far as the ears, and thence continued by dotted lines to the extremities of the axis. Or, a square and the posterior curves may be applied to the underside of the same line, upon which the first-mentioned square and the superior and anterior curves are erected, as shown at fig. 3. Figures 1 and 2 represent an excellent development; and figure 3, one of those miserable specimens of organization, from which no good can be hoped.

3. *The width of the head at the widest part.*—The absolute measure of this distance in inches is of little or no value, but its length, its altitude, and its longitudinal position in relation to the line representing the axis are very useful to be observed, as showing the degree of elevation, and of forward or backward position of the most prominent lateral organs. It is shown by the dotted lines in figures 1 and 3.

4. *The length of the head at the longest part.*—This line is subject to great variation in altitude and in angular position, and is worthy of being carefully studied, as well in respect to its whole altitude as in the comparative altitude of its two extremities.

5. *The external angle of the eye.*—This is a point of considerable importance; from which lines may be drawn to the ear, to the crown, and to the top of the forehead; affording useful comparisons with several other points and distances.

6. *The distance from the orifice of the ear to the external angle of the eye.*—This distance is very useful in considering the elongation of the intellectual region as compared with the animal.

7. *The termination of the hair at the forehead.*—This appears to be the natural boundary between the moral and intellectual regions, and therefore it is of considerable consequence that its situation be accurately laid down and well studied when baldness hinders not. Three useful lines may be drawn from this place, namely, to the crown, to the axis of the ears, and to the external angle of the eyes; all which lines will afford very important indications.

8. *The altitudinal distance from the external angle of the eye to the top of the forehead.*—This line affords a good measure of the altitude of the intellectual region.

9. *The crown of the head.*—The crown is one of the most remarkable natural points of the whole head, since from this point the hair radiates in all directions. The crown, therefore, appears to be a great natural boundary; probably it separates the moral

from the animal region; all the hair growing upwards and forwards lying upon the moral region, and all the hair growing backwards and downwards enveloping the animal region. Taking this view, it will require much observation to determine whether self-esteem lies behind the crown or around it: if around, which is highly probable, then the forward half of self-esteem may belong to the moral region, and the backward half to the animal: that operation of self-esteem, producing dignity of deportment, partakes of moral action; while that, manifesting itself in haughtiness, appears to flow from animal propensity. Some persons have two crowns; this does not much affect the phrenological view, since they are almost always of nearly equal altitude. Persons, whose attention has never been called to the subject, will be surprised to hear that in some heads the crown is full *three inches higher than in other heads:* is it that the height of the crown indicates the exaltation of self-esteem, while the distance from the orifice of the ear denotes its power?

10. *The distance in a direct line from the crown to the top of the forehead.*—The length, the altitude, and the angular position of this line, afford indications of very great import, in showing, by its length, the proportionate longitude of the moral region; and manifesting, by the altitude and the direction of the curve above the line, the comparative altitude of the moral region.

11. *The distance from the crown to the middle of the axis of the ears.*—The line, marking this distance, may be considered as representing the length of self-esteem; it is an oblique line, the resultant of the altitude and the longitude of the crown; its angular inclination to the last-mentioned line (10) is well to be noted.

12. *The distance from the axis of the ears to the top of the forehead.*—This distance is shown by an oblique line, which may be taken as the resultant of the longitude and the altitude of the upper part of the intellectual region. The three lines (10, 11, 12,) form a triangle, varying in the proportions of its sides, according to the longitude and the altitude of the crown, and of the termination of the hair at the forehead; and may afford to the experienced phrenologist an interesting view of the proportionate development of the three grand regions of the brain, the moral, the intellectual, and the animal, except as to latitude, which must of course be taken into the account before a sound conclusion can be arrived at. Figure 4 shows these lines.

13. *The bottom of the eye-brows over the middle of each eye.*—A plane passing through the upper part of the orbits of the eyes, or the bottom of the eye-brows, and through the axis of the ears, will very nearly coincide with the base of the brain, as may be seen by cutting skulls in this plane. A line representing this plane where it cuts the vertical medial plane, is useful to designate the brain, nearly as a vertical section would appear in profile, making due allowance for bone and integument, this line is shown by a dotted line in fig. 4, and also in figs. 5 and 6.

14. *The distance from the axis of the ears to the bottom of the forehead, passing through the middle of a straight line drawn*

under the two eyebrows.—This line is the anterior portion of that last mentioned, and well represents the longitude of the perceptive organs.

15. *The distance from the axis of the ears to the back of the neck, in the direction backwards from the line No.* 14.—This line is the posterior portion of the dotted line, figures 4, 5, and 6; when compared with No. 14, it affords a proportionate measure of the longitude of the inferior animal organs.

16. *The distance from the axis of the ears to the nearest part of the back of the neck.*—The line representing this distance will frequently coincide with No. 15; but, in some heads will diverge considerably from it.

17. *The distance from the top of the forehead to the line uniting the lower part of the eye-brows.*—The line, showing this distance, will be useful as a base upon which to compare the curvature of the medial line of the forehead.

18. *The direct distance from the crown to the middle of a straight line drawn through the outer corners of the eyes.*—The line drawn from the crown to the corner of they eye, would, perhaps, be the best single line that could be adopted, for showing the proportionate development of the moral and intellectual region in comparison with the animal. Fig. 5, shows this line in a case of preponderance of the moral and intellectual over the animal; Fig. 6, in a case of animal preponderance.

19. *The distance from the crown to the line uniting the eyebrows.*—The angle which this line makes with the line No. 14, will be useful in representing the acuteness or the obtuseness of the perceptive powers.

20. *The direction from the crown to the back of the neck.*—The line, showing this direction, is very useful as a base with which to compare the curvature of the posterior medial line; and the angle, formed by the meeting of the lines Nos. 20 and 11, at the crown, will intimate in another manner the degree of longitudinal development of the inferior posterior organs.

21. *The greatest distance from the axis of the ears to the upper part of the head.*—The angular direction of the line representing this distance, will take a great range, and show the place of the greatest altitude of the medial moral organs, affording much useful consideration respecting character, weighed, of course, in relation to all the other developments.

22. *The width between the inner corners of the eyes.*—This width, it is well known, is affected by the lateral development of the organ of form; yet form may sometimes have considerable latitude, while the eyes themselves are not wide apart; and the eyes being very far asunder, will often be found accompanied with the indications of narrow form: perhaps the width between the eyes may be taken as the index of the lateral development, or latitude of the anterior and superior medial organs generally.

23. *The width of each eye.*—This width seems likely to affect the latitude of each of the organs of the superciliary ridge imme-

diately; the organs of time, causality, and imitation, remotely; and perhaps may have a still more extensive range of influence, even to hope, justice, and love of approbation.

24. *The width from centre to centre of the eyes.*—English eyes in adults vary from $2\frac{1}{8}$in. to $2\frac{2}{8}$in. in width from centre to centre of the pupil, while German eyes range from $2\frac{3}{8}$in. to $2\frac{7}{8}$in. This I know from very numerous measurements. The English and German adults' heads, bear something like the same proportions in width. The English varying from $5\frac{1}{2}$in. to $6\frac{1}{2}$in. and the German from 6 to 7 inches. Now it is not to be believed that this extra width of the German head is due to the extra breadth of the lateral organs of acquisitiveness, destructiveness, combativeness, &c.; but rather to the lateral expansion of the medial organs, and of the intermediate ones, lying between the medial and the lateral; since the Germans are distinguished for great breadth of feeling in the exercise of their faculties of veneration, benevolence, comparison, eventuality, and individuality; and also for their justice, hope, imitation, marvellousness, time, harmony, and arrangement; while their moderation in the exercise of acquisitiveness, destructiveness, and combativeness, is notorious. These facts fly in the face of all measurements of the head, in inches, and parts of inches, and prove that such measurements can throw no light whatever upon phrenological development; futile modes of comparison, to which our northern friends so pertinaciously adhere.

25. *The width between the external angles of the eyes.*—The length of the line, marking this width, being made up of the lines (Nos. 22 and 23) may be usefully considered as the measure of the conjoint latitudes of the medial and intermediate organs; and consequently, the difference between the length of this line, and that of the extreme breadth of the head, may be adopted as the representative of the latitudinal development of the lateral organs. And thus it may be seen, that the width of the eyes is essential to be noticed and compared with the whole width of the head, before any fair estimate can be formed of lateral development.

26. *The profile outline.*—This line is a *sine qua non*, to which all the other lines of longitude and altitude refer, and without which they signify nothing.

27. *The horizontal circumference of the head at the largest part.*—The absolute length of this circumference, is of very little if any importance in a phrenological point of view, although many persons place much dependance on it. The points worthy of study in this line, representing the outline of a horizontal section of the head, are, the comparative length and breadth of the included space; the interior or posterior position of the line of greatest breadth; and the greater or lesser curvature of the various parts of the circumference; all affording much valuable matter in judging of character.

From the numerous natural fixed data, now seen to exist, it will be evident that a hasty conclusion from observing a few points, may prove exceedingly erroneous; those therefore who wish to promote the science, would do well to take a very extensive survey

of the head, before forming any opinion. The off-hand judgments of some of our eager-to-show-off tyros, have done more towards retarding the progress of the science of phrenology, than all the endeavours of its avowed enemies.

It will thence appear, that a mode of expressing the three dimensions of each organ, namely, its altitude, its longitude, and its latitude, in a single word, is very desirable. Until a better mode is proposed, the following, it is suggested with diffidence, might be found a useful nomenclature.

Let the vowels a, e, i, o and u, respectively signify *very small*, *small*, *moderate*, *large*, and *very large;* a greater subdivision of magnitude would be more fanciful than beneficial. Let altitude be contracted to alti, longitude to long, latitude to lat: then let the *i* in alti, the *o* in long, and the *a* in lat, be liable each to give place to either of the other four vowels: and thus let alta signify very low; alte, low; alti, of a moderate height; alto, high; altu, very high—lang, very short; leng, short; ling, of a moderate length; long, long; lung, very long—lat, very narrow; let, narrow; lit, of a medium width; lot, wide; lut, very wide.

By compounding a word of the three contractions, and by ringing the changes on the five vowels, 125 words may be formed, which will aptly express all the magnitudes in all proportions of the three dimensions.

Thus, for example, altalanglat will mean very low, very short, and very narrow. Altelenglet; low, short, and narrow. Altilinglit; medium in all three dimensions. Altolonglot; high, long, and wide. Altulunglut; very high, very long, and very wide. Variable proportions would be expressed by Altilonglut; moderately high, long, and very wide. Altulonglet; very high, long, and narrow. Therefore, when we would express that a person's organ of benevolence is very high, very short, and moderately wide, it would be said that his benevolence is Altulanglit, which three dimensions, reduced to one average, would be found to be moderate.

Since writing the above, I have given much thought to the subject of expressing, in a compendious manner, the average of the three dimensions of phrenological organs; and I would now propose as an amendment, instead of the vowels and syllables suggested, that the magnitudes be represented by the numbers 1, 2, 3, 4 and 5, and that 1, shall signify very small; 2, small; 3, medium; 4, large; and 5, very large: that the place of units, shall be appropriated to the latitude of an organ; of tens, to the longitude; and of hundreds, to the altitude.

Then will 111, signify very shallow, very short, and very narrow.
222, shallow, short, and narrow.
333, medium in all the three dimensions.
444, high, long, and wide.
555, very high, very long, and very wide.
123, very low, short, medium width.
321, medium height, short, very narrow.
345, medium height, long, very wide.

And so of every other triple combination of the five numbers.

Now to obtain an average expression in one number, we may add the three numbers together, and divide the sum by 3, thus—

1	1	1	2	2	2	3	3
1	1	2	2	2	3	3	3
1	2	2	2	3	3	3	4
3) 3	3) 4	3) 5	3) 6	3) 7	3) 8	3) 9	3) 10
1	$1\frac{1}{3}$	$1\frac{2}{3}$	2	$2\frac{1}{3}$	$2\frac{2}{3}$	3	$3\frac{1}{3}$

3	4	5	4	5
4	4	4	5	5
4	4	4	5	5
3) 11	3) 12	3) 13	3) 14	3) 15
$3\frac{2}{3}$	4	$4\frac{1}{3}$	$4\frac{2}{3}$	5

By this procedure we have sometimes the fraction of $\frac{1}{3}$ or of $\frac{2}{3}$. The $\frac{1}{3}$ may well be dropped, or the $\frac{2}{3}$ increased to the next whole number, without injuring the estimate. But should any one wish to retain the fractions, they may be expressed by the words *above* or *below*, and thus the magnitudes will be augmented 13; yet, as intimated before, I think 5 sufficient for all phrenological purposes.

The suggestions contained in this paper may be considered as land marks and direction posts, by which the beautiful and fertile fields of the highly important science of phrenology may be advantageously explored.

The natural ramifications of the subject would easily expand into a volume, and unfold many useful lessons on the modes and means of making observations on cerebral development, and on so reducing those observations into orderly arrangement, that they may become generative of extensive views, stimulative of further researches, and indicative of new paths, through which this interesting science may be pursued with still increasing profit and pleasure, ever enlarging our perceptions of the harmonious fitness of things, in this the highest order of the works of creation, and of providence.

The more we explore the ground, the more need we shall feel of employing great care and circumspection in directing our steps, and in avoiding a heedless race towards a seemingly obvious goal, between which and us lie numerous swamps and quagmires of error, which the indications here suggested might enable us to escape.

By careful examination it will be manifest, that the study of phrenology is not such a school-boy exercise as may be taken up and learned by rote, and that it is not possible for superficial minds to grasp a sufficient portion of the system to enable them to form a single sound opinion on the subject. It is true that they may pick up enough, in their loose way, to beget faith in the observations of others, or to generate incredulity as to the truth of the science; but it is the observer alone who, by close investigation and deep consi-

deration, can be qualified to draw any rational conclusion for his own guidance.

The pursuit of phrenology is one of the highest order, since it promises more than any other science, to aid us in obtaining clear views of the nature and capabilities of man. It opens in the mind luminous perceptions of the harmonious operations of the internal, in and upon the external world, in a way which the student alone can appreciate; and it may be fearlessly stated to the anti-phrenologists, that every person, who has not minutely studied the science, is totally unqualified to pronounce judgment on it, and therefore can only disgrace himself by opposing it.

The phrenologist, on his part, should cautiously avoid stimulating opposition, by indulging too freely the seductive spirit of prediction; the legitimate, and most noble use of the science, being, to acquire perceptions of the correspondence existing between the internal and the external world, between *mind* and *matter*. It will be more profitable to look at development after manifestation, rather than before, and thus to be willing for a long time to occupy the place of students, and not hastily to aim at becoming professors.

Before closing this paper, I would throw out the hint, and ask future observers to note, whether or not my suspicions are correct, that every organ is liable to a twofold general variation in its functions; each of which, has a threefold particular variation; one variation arising from its own proportionate development, in respect to its mass, and the other from its situation in regard to the mass of the brain; in other words, that every organ will be capable of different affections, according to its own proportionate dimensions, as to altitude, longitude, and latitude; and also, according to its altitude, longitude, and latitude of position, in relation to the whole brain.

Thus, great altitude of an organ in the brain, would give a general moral tendency, taking cautiousness as an example, would give moral cautiousness, or rectitude; great anterior longitude, in its position, would incline to intellectual cautiousness, or carefulness; great posterior longitude, great latitude, or low position, would lead to animal cautiousness, or bodily fear.

The proportionate development of the respective organs in relation to their masses, would imply similar modes of affection, but in a more particular degree. The combination of the general and particular variations, may be supposed to produce that indefinite variety of character which exists in the world.

If these notions be either proved or disproved by seven years of observation, much will be gained for the science.

In conclusion, it may be useful to state, that I take the curves of the head by means of a flexible wire made of pure grain tin, cast in a mould of one-fifth of an inch diameter, and drawn down to one-tenth of an inch. Having thus obtained the curve, I lay the wire down on paper, upon which I mark the outline with a fine pencil, passing closely around the inside of the curved wire. It should be known, that the least portion of alloy of any sort, added to the

tin, would occasion elasticity in the wire, and thereby defeat the object, which is, to obtain the correct forms of the curves.

The mould is formed in two pieces of wood, in each of which is a semicylindrical groove made lengthwise of the piece; the two grooves being laid opposite each other, and the pieces being bound or otherwise held close together, a cylindrical aperture is formed, into which the melted tin being cast, the rod will be obtained ready to be drawn down to the proper size, by the ordinary method of wire drawing.

Our worthy vice-president informs me that he made a good mould, by wrapping and tying a piece of writing paper around a wire and then drawing out the wire, and placing the end of the paper mould in a hole bored in wood. Into the paper thus held upright, he poured the melted tin, and produced a good cylindrical rod.

THE MIND OF THE CREATOR MORE FULLY UNVEILED. MR. BELLAMY'S PETITION.

This Magazine was commenced by the statements, that most of the evils under which man labours can be remedied by attention to the laws which the Creator has appointed for the regulation of man's condition: that the *volume* of Revelation will be made use of to benefit man's *internal* and *external* condition: and, that, the *volume* of Nature will be used to benefit man's *external* and *terrestrial* condition.

The volume of Revelation, as translated, has serious *mistakes*. What pleasure, then, have we to refer to an event, memorable in the history of the progress of truth, which took place on Wednesday, July 20, in the House of Commons.

"Mr. Brotherton presented a petition from Mr. John Bellamy, of Wells Street, Gray's Inn Road, representing that the petitioner having seen the direful effects of certain deistical writings, and having directed his attention for a series of years to the Hebrew language, he, with the approbation of some learned bishops and eminent divines, undertook to translate the Scriptures from the original Hebrew, the present authorized version not being translated from the Hebrew, but from translations. The petitioner had been constantly engaged in the work for upwards of forty-eight years; the result of his labour was, that he had translated the whole of the Bible from Genesis to Malachi. The translation would prove that the objections of the deist applied only to the mistranslations of the authorized version, the wrong interpretations of men, and not to the Bible in the original language. The petition contained a number of passages, in which the old and new versions were contrasted. According to this new translation, the laws of scripture and the laws of nature were in harmony. The word of God, rightly understood, never contradicted the works of God: that God is not inconsistent, sanctioning at one time what he forbids at another: that polygamy, incest, adultery, murder, and robbery, are not sanctioned in the original in any age: that the characters of Abraham, Lot, Moses, Joshua, and other servants of God, may be completely vindicated from the imputations which have been cast upon their characters."—*The Times, July* 22, 1836.

We may, therefore, look to a more complete unveiling of the mind of the Creator, as developed in the volume of Revelation: its importance will be illustrated in the next series.

J. TRAPP AND CO. PRINTERS, BUDGE ROW, LONDON.

THE

CHRISTIAN PHYSICIAN,

AND

Anthropological Magazine.

VOL. II.

" Scire vere est scire per causas."

" To know truly is to know things through their causes."

LONDON: PUBLISHED FOR THE PROPRIETOR BY

SHERWOOD, GILBERT, & Co., 23, PATERNOSTER ROW.

1837.

J. TRAPP AND CO., PRINTERS, 31, BUDGE ROW, LONDON.

INDEX.

SEPEMBER.

PAGE.

1 Address to the Reader
4 Church Establishment in Ireland.—Appropriation of the Million Fund.
6 Morality considered in connexion with Conscientiousness
17 Irresponsible Power contrary to the will of the Creator.
20 Obedience and Happiness—Disobedience and Misery. Mis-translations of the Scriptures. John Bellamy's interesting Petition.
26 The Human Body, Essay X. — The Spine. The Spinal Cord.

OCTOBER.

29 Phrenology in its Applications.
36 Irresponsible Power. The Organic Disease.
41 The Human Body, Essay XI.—The Spine. The Spinal Cord.
43 On Spinal Complaints.
46 Letter to the Editor.
47 Education & the British Association.
54 Misprinting of John Bellamy's Petition
55 Newspaper Stamp Duty. The Times and the Morning Advertiser.
57 Drowning at-Sea Society. Obedience and Happiness — Disobedience and Misery.
57 Beauty and Utility.
57 Gratitude.
58 Translation of the Scriptures.
59 Corn Laws. Obedience and Happiness—Disobedience and Misery.

NOVEMBER.

61 Phrenology and Education, Essay II.
70 Drowning-at-Sea Society. Obedience and Happiness — Disobedience and Misery.
73 The Dissenters & Establishments.
83 A Phrenological Account of James C. B. Hawkins.

DECEMBER.

93 Laws regulating Civil and Religious Obedience. The Dissenters and Establisments
100 Mutual Instruction Societies.

PAGE.

101 The Uses of Chemistry.
109 Practical Application of the Facts detailed respecting the wonderful structure of the Spinal Column.
114 Chalmers's Soul's Progress into Narrowness.
116 A Phrenological Account of James C. B. Hawkins.
120 The Curse of War. Obedience and Happiness — Disobedience & Misery. Spain, Poland, &c.
123 Suggestions for the Improvement of Phrenological Busts.

JANUARY, 1837.

125 Phrenology and Education, Essay III.
131 The Book of Moloch.
133 The Uses of Chemistry.
141 Civil and Religious Obedience. The Dissenters and Establishments.
149 A Phrenological Account of James C. B. Hawkins.
155 The Human Body, Essay XII.

FEBRUARY.

157 Phrenology and Criminal Legislation and Criminal Discipline.
165 Spinal Deformities.
170 A Few Words on several Subjects.
171 Civil and Religious Obedience. The Dissenters and Establishments.
174 The Book of Moloch. Chapters III. and IV.
176 The Human Body, Essay XIII.
178 Senatorial Prophecies.
179 The Wig Riot.
180 The Next Step.
180 Enquiry as to the cause of the difference in the size of the Two Sides of the Head.
181 Surplus Revenue in the United States, and a Plan to render it useful to Britain.
183 Report of the Shipwreck Committee.
185 Remarks on Homæopathy.

MARCH.

189 Phrenology and Criminal Legislation, and Criminal Discipline.
196 Irish Clergy.

PAGE.
196 Obstinate Stupidity.
197 Civil and Religious Obedience. The Dissenters and Establishments. Lord Abinger. Church Rates.
205 Address delivered at the First Anniversary Meeting of the Anthropological Society, by the President, John Isaac Hawkins.
213 Spinal Deformities.
219 Deputation from the Dissenters.
220 Monument to the Scotch Martyrs. The Wellington Statue.

APRIL.

221 Phrenology and Criminal Legislation, and Criminal Discipline.
228 Septennial Act. House of Commons abdicating its power.
229 On the Causes and the Seat of Constitutional Spinal Distortions.
233 (Open your Eyes.) Bank of England —the Danger to the Country.
237 The House of Commons. The Squierarchy and the Labouring Classes.
239 On the Character and the Source of the Disagreeable Feeling suggested by the Observation of Uncleanliness of the Person.
243 The Earth and Man.
243 British Museum.
244 The Book of Moloch, Chapter V.
245 Finsbury Discussion Society. Question—Is the Female Mind equal to the Male?

MAY.

253 Public Walks.
256 Hints on Educational Reform in connexion with Phrenology.
259 Letter to Sir Benjamin Brodie, by Dr. Harrison.
261 On the Advance of Democracy.
269 A Phrenological Analysis of the History of a Boy born Blind and Deaf.
276 Finsbury Discussion Society. Question—Is the Female Mind equal to the Male?
284 No Effort is Lost.

JUNE.

285 A Phrenological Analysis of the History of a Boy born Blind and Deaf.
289 Drowning at Sea Society.
290 Early Musical Power.
292 Free Men Think.
293 On the different Varieties of the *Outer* or *Backward Curve.*
299 Church Dominant.
299 Intolerance and Wit.
300 Song, describing an Animal not mentioned by Buffon.
301 Disobedience and Misery—Obedience and Happiness. Corn Laws.
306 Dr. Harrison's Infirmary.
307 Finsbury Discussion Society. Question—Is the Female Mind equal to the Male?
314 The Distribution of Wealth—Political Economy Society.
316 Cutting off a Right Hand.

JULY.

317 On Spinal Deformities.
325 Extracts from a Lecture on the Organ of Veneration, by Dr Epps.
332 London Anti-Corn-Law Association.
335 On Education as it is and as it should be.
342 Mutual Improvement Society of Windsor, Eton, and their Vicinities.
344 Finsbury Discussion Society. Question—Is the Female Mind equal to the Male?
346 Progress—Scientific, Moral, and Political.
348 Lord Abinger's sage (?) Defence of Church Rates.
348 Queen Elizabeth—Her Tact.

AUGUST.

349 The Queen's Friends.
360 Second species of Spinal Deformities.
363 Beneficial Application of Phrenology in the Treatment of Cerebral Disease.
365 Address delivered to the Kentish Town Mechanics' Literary and Scientific Institution, by John Isaac Hawkins.
372 Romanism in the Nineteenth Century.
373 Essay on the words "Flesh" and "Spirit," Phrenologically considered.
380 French Mode of Election.

The First Volume, in boards 5s., can be obtained of the Publishers.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[*ανθρωπος*, anthrōpos, *man*, and λογος, logos, *a discourse.*]

No. I.] SEPTEMBER 1, 1836. [Vol. II.

ADDRESS TO THE READER.

"*What will happen?* is the inquiry of many anxious individuals, an inquiry readily answered by him, who has a strong faith in the progress of humanity, and an equally strong conviction, that such progress is *the will of the Creator.* Man seems to have been and to be placed in a condition of working out his salvation, and that not, as wise men should, with joy and gladness, but by the activities of his cautiousness, namely, "with fear and trembling." Men will not learn, in the majority of cases, except by suffering. Men will not learn to avoid vice, but by the sufferings which vicious courses bring. Men will not learn to do justly, except when taught by the miseries that injustice brings. Men will not learn to rejoice in God, until they have experienced the miserable ennui, mental vacuum state, connected with the want of that high and exalted communion, which subsists between the human soul in its highest activities and the Creator's mind, of which man's may be, with propriety, considered a part.

What we want is to persuade men that the Creator has, in his benevolent wisdom, *appointed laws to ensure man's happiness:* That happiness is *certain to result* when these laws are obeyed, and that misery is sure to come when these laws are disobeyed; that therefore the objects of the teacher of his fellow men should be to *discover* these laws; to *develop* them in clearness: to use every persuasive means to induce men to obey them: and, at the same time, to use every exertion to abolish all legal, all *governmental interferences* with, or violation of these laws.

First. In the discovery of these laws it is necessary that the greatest care should be taken so that the *fiat of the Creator* be not appended to any fiat of *our own.* The effect to be derived from the conviction, that such and such a law has with it the authority of the Creator, has been much diminished by many dogmas, described as thus authorized, having been found, by after investigations, to have no such dignified claim.

One striking instance of this may be recorded. Dr. Priestly found, that, when a sprig of mint was placed in a tall glass vessel, filled with water, and the open end of the glass vessel immersed in another vessel containing water, and was then exposed to the sun, little globules of gas escaped, which collected at the upper end of the vessel. This gas, on examination, he found to be *oxygen* gas;

which oxygen is the great *supporter of life*: it being from the existence of that gas in the atmosphere we breathe, that man is enabled to live.

This fact, therefore, seemed to afford a foundation for the following hypothesis: namely, that as man and all animals in the process of *expiration* give out *carbonic acid* gas, (a gas destructive to life), and therefore adulterate the atmosphere, the Creator has appointed, that the vegetable kingdom, the individuals of which, as would appear from the experiment of Priestly, give out *oxygen* gas, should be the means of restoring the atmosphere to its state of purity. This theory, affording such a pleasing illustration of wisdom, in making the animal and the vegetable kingdoms mutually compensate each other, was considered so beautiful, and so strikingly illustrative of the divine wisdom, that it was caught at, and was received, on account of this, its very pleasing beauteousness, without due examination. The consequence was, that when the fact was discovered, that plants give out carbonic acid as well as animals; that both act as deteriorators of the atmosphere; and that the *green* parts of plants, and those *only when exposed* to the *direct rays* of the sun, give out oxygen gas; the atheistical mind took the opportunity, and taunted the admirer of the wisdom of God, as supposed to be exhibited in the compensation referred to, as taking great liberties with the Deity, as making Him show wisdom where actually he showed none: at least in the way in which the admirers declared that it was shown.

Care therefore should be taken in reference to this particular.

Second. The law being discovered, it is necessary that it should be *presented in clearness.* There exists a sublime simplicity in the laws of the Creator. They are as magnificent *in effect*, as that command is *in words*, "Be light and light was."* We see the law, however, only in its effects: and one of the pleasurable, the noble travails of man's soul is to pass upwards from the effects to the cause; and, separating every thing extraneous from the direct operation of the law, to discover, in its majestic simplicity, the law itself. A few words will generally embrace the law.

Third. But men require persuasion to lead them to recognize the law. Unfortunately the laws of society are so opposed to the laws of the Creator, so many practices have crept into society under the influence of these laws, and these practices have so influenced the minds of the many, that great labour is required to induce individuals to attempt to shake off these prejudices, and examine the law in reference to themselves. Persuasion, therefore, is necessary, and persuasion stimulated by the detection of the fact, that, however various the means adopted to prevent the violations of the law being perceived, still the effects of the violation are traceable, though invested with all those pageantic trappings, begotten by pride upon intellect, by which men endeavour to shut out the convictions of human misery.

---

* John Bellamy's translation of the passage in his new translation of the Bible.

Fourth. One fact, moreover, which appears during an investigation of the circumstances connected with the progress of man in society is, that the most effectual barriers to that progress are to be found in the existence of *legalized* violations of the laws of the Creator: in other words, that goverments have passed laws, which are in direct violation of the laws of the Creator. It will be therefore the bounden duty of him, who is convinced that man cannot be happy unless he obeys the laws of the Creator, to use every means to get rid of those laws, insulting to the Deity and impedimental to humanity. Such an advocacy will *necessarily* entrench upon the field of *politics*. Many persons think that this field should not be entered upon in a Magazine devoted, as this is, to progress; but can any person read the above, without acknowledging that an entrance upon this field is essential to the forwarding that great aim of all honest and christian men, namely, HUMAN PROGRESS. If those, who think that politics should not be entered upon, will show that the existence of laws, which legalize the violation of the laws of the Creator, does not constitute an impediment to human progress, we shall be glad to eschew the subject: till then, it will be the duty of him, who loves human happiness, to attack, (with the desire to improve) however, every violation of the Creator's laws, exhibited whether in high or low places; whether by those who have authority, or by those who are subject to authority.

By politics, as used in this Magazine, is to be understood, not the history or the concerns of parties, squabbling respecting the right of tenure of the offices of government, but the *regulations of civil society*, called government, by which man's progress, happiness, and protection, as a member of civil society, can, so far as laws can do this, be ensured.

What will happen? are we now asked. We answer, violation after violation of the Creator's laws will be detected: the evils, from such violations arising, will be pourtrayed: persuasions to induce men to cease to violate, and to prevent legislatures passing or perpetuating laws, authorizing such violations, will be brought forward: a public sentiment of desire for the right, because the wrong must be productive of misery, will be generated; and then will happen that glorious state of things, which the Divinity thought worthy to have declared by a company of angelic beings, with heavenly music, in the still calm of an eastern night, namely, GLORY TO GOD IN THE HIGHEST, ON EARTH PEACE, GOOD WILL AMONG MEN.

To the realization of this end the pages of this Magazine are devoted: with what success it is hoped the reader's experience will be able monthly to declare.

These few remarks may form an appropriate introduction to this the second volume of the Magazine: it is, in fact, an Address to the Reader: an Address, which will be useful in preventing the views of the conductors of this Magazine being misunderstood: and will enable the friends of success to state, fearlessly, the grounds upon which public favour is sought.

CHURCH ESTABLISHMENT IN IRELAND. APPROPRIATION OF THE MILLION FUND.

At pages 42 and 43 of the first volume, will be found tabular views of the relative cost of the clergy in different countries, from which it appears that the expenditure upon the clergy in Great Britain and Ireland amounts to upwards of *ten millions:* a sum greater by *a million* than that of the clergy of all the European countries put together.

About three sessions since the clergy of Ireland made a pitiful appeal to the British Parliament for aid in their distresses, they being in danger of starvation on account of the *general resistance to tithe:* they obtained the loan of a million.

Mr. Daniel Whittle Harvey has obtained, with considerable difficulty however, a parliamentary return, containing "An account of the mode in which £635,712. out of this million loan has been disposed of, with the names and the residences of the recipients;" an account, proving that the public charity has been grossly abused.

TO THE BEGGARMEN.

First, let us take the clergy. When a parson is non-resident—when he can afford to live in Dublin, or Bath, or Chester, or to roam about the country as a clerical agitator—he is surely not to be reckoned among those entitled to receive public alms. But we find among the clerical recipients, forty residents in Dublin, exclusive of the Reverend Charles Boyton, who is put down as living in Dovea. Mr. Boyton's tithes were in arrear for *one* year only, to the amount of £1089.; and he had an advance of £912. Was Mr. Boyton one of the distressed? We have not the least doubt that many are entered as resident clergymen who are not so really; for we observe, in repeated instances, that the duty of small livings is done by curates, when the rectors are said to be on the spot. The famous Mortimer O'Sullivan is said to reside at Killeman, Moy; but it does not appear that *any body* has done the duty of his parish, while he has been notoriously tramping through England on his mission of bigotry. Several avowedly live in England; and among them we note the Reverend Hans Hamilton, of Maida Hill, London, who had £2793. 19s. 1d.; and the Honourable and Reverend James St. Leger, of the Circus, Bath, who was assisted to the amount of £2494. 11s. 4d.

So much as a specimen of the non-resident claimants for relief. Let us now turn to some of the numerous aristocratic clergy, the relatives of the wealthy, who have not disdained to encroach on the fund destined for the really *distressed.*

There are *fifteen* ARMSTRONGS, principally of the diocese of Cashel, who shared £8811. 15s. 3d. among them.

The Reverend Dr. BEAUFORT . . .	£2463	4	5
The Honourable and Reverend GEORGE DE LA POER BERESFORD	767	0	4

The Honourable and Reverend GEORGE DE LA POER BERESFORD	350	16	6
The Reverend G. D. BERESFORD	213	18	4
The Reverend *Marcus* GERVASE BERESFORD	1053	14	4
The BOURKES, three of them Honourable as well as Reverend	8027	6	7
The BURGHS	1195	16	8
The BUTLERS	6755	1	9
The CHICHESTERS	3772	19	8
Dr. COTTON, of Dublin (three advances)	4080	19	3
The CROKERS	2265	0	10
The DAWSONS	1557	11	9
The ELRINGTONS	3612	7	0
Thirteen HAMILTONS	10,446	17	0
Six KNOXES	2581	4	5
Sir HARCOURT LEES	428	7	0
Four Honourable and very Reverend MAHONS	3812	16	8
Ten MOORES	5329	17	5
Two RYDERS, *of Rathcormac**	557	19	4
The STEVENSONS (one of them living in Chester)	5072	5	3
Five Honourable, Venerable, and Reverend STOPFORDS	7776	1	1
The ST. LAWRENCES (one of them a Venerable).	3114	6	6
Five TOWNSENDS	2681	10	3
Nine TRENCHES (Honourable and Venerable)	7710	13	7
Three *Whittys*	1207	11	6
The Archbishop of Cashel	2063	4	1
The Dean and Chapter of Cashel	795	17	5
The Lord Bishop of Clonfert	1291	10	3
The Lord Bishop of Cloyne	3290	0	10
The Dean and Chapter of Cloyne	455	14	11
The Dean and Chapter of Cork	613	10	6
The Lord Bishop of Ferns	2198	4	4
The Lord Bishop of Kildare	1892	3	0
The Dean and Chapter of Kildare	11	14	8!
The Dean and Chapter of Killaloe	999	9	9
The Dean and Chapter of St. Canice, Kilkenny	588	13	6
The Vicars Choral of Ditto	48	7	8
The Vicars Choral of St. Finnbars, Cork	1552	15	4
The Dean and Chapter and Vicars Choral of Lismore	1012	8	6
The Dean and Chapter of St. Patrick's	910	2	10

The above will give an idea of the extent to which the aristocratic portion of the Irish clergy have benefitted by the liberality of the British Parliament. The money was intended for suffering clergymen, not for the BUTLERS, BERESFORDS, DAWSONS, TRENCHES, and KNOXES; nor for Archbishops, Bishops, Deans, and Vicars Choral; but they, as usual, griped the lion's share.

We now come to the most discreditable part of the job. Well

---

* Where the widow's son was slain.

might Lord STANLEY say, that there are names in the list, of men who ought sooner to have cut off their right hands than have applied for alms out of the Clergy Fund.

The Duke of DEVONSHIRE (!) had . . .	£3144	17	8
Viscount DE VESCI	1019	3	2
Viscount DILLON	202	19	4
The Earl of DONOUGHMORE	327	9	8
The Dowager Marchioness and the Marquis of DOWNSHIRE	2697	4	8
The Earl of ESSEX	82	13	11
Viscount FERRARD	784	0	0
The Marquis of HEADFORT	118	15	8
Sir FRANCIS HOLYOAKE GOODRICKE . .	327	6	2
Viscount LISMORE	529	10	11
The Earl of NORBURY	287	6	3
The Marquis of ORMONDE	2426	7	9
The Earl of SHANNON	288	2	2
Viscount SOUTHWELL	35	2	10
The Marquis of WESTMEATH	751	7	9

Here we close for the present; but we must add, that these lists give by no means an adequate idea of the sums appropriated by men of rank, lay and clerical. "Honourables" and "Very Reverends" swarm in every page. The property of the church is indeed parcelled out among lords and gentlemen. No document we have ever perused impressed us so strongly with the conviction, that to attempt to reform the church in Ireland, is mere waste of labour and patience; it must be done away with altogether.

For the above facts the writer is indebted to the Editor of the Spectator: and records them with the view of showing that as the principle upon which a legal church establishment is founded is a violation of justice, these results follow as necessary consequences of the violation; and, therefore, it is the duty of him, who believes that the Creator has fixed laws for the regulation of the world so as to produce happiness, to point out any evidences, as they may occur, of this important truth: and evidences often are most effectual which are of the negative character. Such are those before the reader.

MORALITY CONSIDERED IN CONNECTION WITH CONSCIENTIOUSNESS.

Read before the Anthropological Society, June 2nd, 1836, by Mr. William Raine.

All created existences may be viewed either in their disposition or in the phenomena which they evolve; at rest, or in activity; in the order of their arrangement; or, in the succession of their events. If palpable to the senses, they may be observed as simple existences, with such particulars of form, size, colour, &c. as may attach to them; or we may mark the phenomena which they

generate, with the place, time, and order of their occurrence. Thus, we may observe the structure of an organized being; or, we may notice the various functions or activities which belong to it. The one is simple perception of existent substances; the other, the observation of their relations and properties. Both are essential to the proper understanding of the entire being.

But there is a yet higher process before we can realize a clear conception of the nature and the end of that being, namely, that of comparing and of judging. It is not enough to know in what manner this being is constituted, and what are its powers and attributes; we require to know why all this skill has been bestowed upon the framing it; what are the indications which may be traced in the arrangement of the several parts, in the adaptation of those parts to each other, in the relations which exist betwixt it and other beings; in short, we must ascend a step in the chain of causation, and trace out what are the means employed, and what is the end in view. We propose to apply this mode of investigation to the subject before us, and although no fresh light may be thrown upon the question, the purpose of the writer will be served, by directing attention to one of the most interesting and momentous topics of human thought.

What is the foundation of right and wrong? Has every human being an unswerving monitor in his own bosom, which decides upon the propriety and impropriety of his actions? Are men the mere passive creatures of external circumstances? Are moral principles adventitious or immutable?

Such are the questions, which have so stirred the thoughts of men, in all ages, that the waves of angry contention have often swept away the landmarks of truth, and the commotion is not yet stilled: the wrecks of systems lay strewed along the shores of that vexed sea of speculation, presenting a mournful spectacle of intellectual ruin.

It may be a solemn thing to stand amidst the broken columns and shattered temples of Athens or Rome, contrasting its ancient splendour with its present decay, and recalling the times when a busy multitude thronged the streets, and the portals of the temples were thrown open to worshippers who have perished with their deities; but it is a yet more mournful thing to turn to the pages of their philosophers, since therein is to be seen the spectacle of mighty intellects grappling with great questions, ill qualified for the grapple by the admixture of superstition, and the absence of such knowledge as was most needful, to realize just and true conceptions of the Divine attributes, as evidenced in his works. But intellectual power is always most imposing in adverse circumstances, as a stout vessel seems greatest in a storm: let us, therefore, revere their power of thought, whilst we cannot assent to the truth of their conclusions. It was Christianity which opened out new views of things human and divine, and its spirit entered into and animated the lifeless body of philosophy: and, men, when freed from the bonds of Polytheism, began to entertain more just and consistent notions of the Divine government. Much contradiction

and darkness yet remained: creeds and dogmas were taught first, philosophy was considered a mere extraneous adjunct, or served merely to enable men to subject the laws of nature to their fancies.

Nor is our age exempt from this charge. The mind is incubized by articles of belief, before it is allowed to examine the simplest thing in nature, and thus becomes prone to reject every view which may appear not to harmonize with what the priest or the nurse taught, not daring to trust to the harmony which must subsist between all truths, whether of reason or revelation. Let it not be supposed that in stating this, we argue that a stubborn scepticism is favourable to the appreciation of design and goodness in the universe. The most convincing proofs seem to the habitually sceptical mere cold coincidences. It is our happiness, however, to be agreed as to the mode of setting about the enquiry. Whatever may be our individual peculiarities of belief on other matters, *we* are pledged to abide by *one great principle:* he, who swerves from this, impugns truths which are demonstrable, and must either give up Phrenology or abide by its decisions. The only escape is to deny the force of arguments which are necessarily true if the premises from which they are deduced be true, and to take refuge in metaphysical or rather in verbal formulæ, which are merely arbitrary and conventional. But the true Phrenologist is a stern and severe thinker, and words have no independent meaning with him: they are either signs of things or nothing, and therefore we would invite the most determined scrutiny upon the principles which will now be asserted.

In conformity with the natural division already pointed out, let us view, in the first place, the situation of the various organs in the human brain, the moral group, and the organ of conscientiousness in particular; then endeavour to point out phenomena having reference to the enquiry; and, finally, seek for the end of all this complex mechanism, by comparing one thing with another, and seeing whether or not there be one principle common to each part of animate creation, which accords with the character of the Almighty, and may be fairly taken as the indication of his will.

It is barely necessary, since we are all agreed as to the fundamental principles of Phrenology, to do more than notice, for the sake of clearness, that there are certain feelings or propensities common alike to man and the lower animals, and that these feelings or propensities are dependant upon the portions of brain, which occupy the posterior and inferior portions of the human head; that there are, also, certain sentiments common to man with the lower animals, which constitute one step higher in their position, in the brain, and in their character; and that there are certain sentiments proper to man, occupying the upper part of the brain; veneration, conscientiousness, and firmness being the crown of the whole.

Of the intellectual powers it is needless to say more than that they occupy the superior frontal region of the brain, and that the individual position of each of them, as well as their relative situations, are fixed and determinate, and that the function performed by each of them is specific and peculiar. No function being performed

without an organ, and each organ acting with power proportionate to its size; cœteris paribus.

The same general organic peculiarities belong, also, to the propensities. Each of them occupies a fixed position in the brain, the function of each is determinate, each acts with its own proper energy. But this difference is observable in the class of feelings to which both the propensities and sentiments belong, viz. that they can hold communion with the external world only by means of the senses and the intellect.

Each of the active feelings desires the special object which stands in relation to it; but to point out this object and this relationship, it needs to be guided and directed, being itself blind.

And the affective feelings, or those which have relation to self, such as secretiveness, cautiousness, and firmness, merely act upon the emotions of the other feelings, or the convictions of the intellect, either in repressing them, or giving them stability, or bidding them take care of danger; but in all this there is nothing analogous to the functions performed by the intellectual powers.

Veneration and conscientiousness, the two most important organs in the moral group, may be viewed, therefore, as giving the feeling of reverence and of justice, but not as seeing, of themselves, whether the object be worthy of reverence, or the action be just. They neither perceive qualities, tendencies, relations, nor any other properties of external substances or objects. Theirs is an internal perception, of things already in the mind. They add an emotion when the thing is perceived by the intellect; or, by a kind of craving after their own proper food, they prompt the intellect to furnish it. The intellect is, therefore, to them, what the teeth, and palate, and œsophagus are to the stomach. But in themselves they are blind.

The five senses, and the organs of individuality, eventuality, form, size, weight, colour, locality, number, order, time, and tune, are the inlets of knowledge to the mind: they perceive the existence of external objects, the phenomena to which they give rise, with all their properties and qualities; language clothes the ideas thus formed in words; comparison and causality compare and judge, form new combinations by generalizing individual facts, launch out into the sea of speculation, trace tendencies, harmonize apparent incongruities; and, finally, when largely developed, are the glorious harbingers of new eras of thought, and, by consequence, of new orders of things in society.

Such, then, is a general view of the functions performed by each class of organs; each function is definite and determinate; each stands in a definite relation to some external object; each is an essential part of the human being; each desires its own good; the proper activity of each produces pleasure; the harmonious activity of all produces happiness. The propensities simply desire their own individual gratification, and, if allowed to run on in unchecked spontaniety, would, instead of producing happiness to the individual, produce misery. They cannot trace the consequences of their activity, they neither know qualities or properties. They only desire the special object which stands in relationship to them,

perceived by means of the senses and of the intellect. But the senses and the intellect, although they perceive, form ideas, frame theories, and link thought to thought until systems are drawn out, do not feel an *emotion*, either approbative or reprobative. That is, they may see the tendencies of an action, and may object to it as likely to produce misery, but they have no instinctive, involuntary emotion connected with them; whereby, without any such calculation, they reprobate or approve a given action. This is the office of conscientiousness. It neither perceives relations, traces consequences, nor frames theories. It simply attaches a feeling of approbation or of reprobation to ideas formed by the senses and the intellect, or impulses communicated by the propensities. In one sense it has an internal perception. There must be a close connection betwixt it and the rest of the brain. Its position should afford it the means of facile communication, and we find that it is at the apex of the head, on each side of firmness and above self-esteem, thereby showing that it needs strengthening and upholding, and that its situation is such as answers the purpose of ready communication.

Thus beautiful is the arrangement of the various organs, each is in its proper place, the situation of each, in relation to the others, answers to its relative situation in harmonious activity with them; so that even their collocation might teach the most profound morality, independent of further enquiry. Conscientiousness, then, by the dignity of its situation, may be said to indicate the nature and importance of its functions. Conscientiousness aided by firmness, veneration by hope, and benevolence joined with these, form the moral arch. But we must remember that these are subject to the general organic law. When the organs are large the sentiments are powerfully manifested; when small the sentiments are feeble: if absent, there would be a corresponding defect in moral character. Conscientiousness, the more immediate subject of enquiry, is, then, like every other organ in this respect, and observation amply verifies the assertion. If there be every shade of intellectual power, from the faintest glimmer of reason, to the full blaze of genius, there is, also, every shade of moral character, and of conscientious feeling, from the nicest and loftiest sentiments of justice that can add lustre to that genius, down to the callous indifference that sits upon the unabashed forehead of the ruffian.

Man possesses the propensities of the lower animals. What is it which marks so broadly the difference betwixt them and him?

If his nature were so constituted that he possessed the propensities which they possess, with nothing of moral feeling superadded, and if the only distinctive mark in his character were the superiority of his intellectual powers, he would, from that very strength of intellect, excel them in energy. His ferocity would be more terrible, because directed more skilfully than theirs; his lusts would be more unbridled, his cunning more deep, his would be the impersonation of greatness in depravity, the most unhallowed demon of the most fevered imagination. The lion and the tiger seize, mangle, and destroy their prey. The destruction of life is the very essence of their being. For this end they are endowed with

vast muscular strength, with claws to seize, and with teeth and fangs to tear their prey. To set this machine in motion, they have a corresponding nervous system, and brain. Doubtless, they have enough of intelligence, misnamed instinct, to guide the impulses of their propensities in the accomplishment of their fierce desires. And fulfilling their appointed destiny in the scheme of creation, they neither require to be endowed with loftier reason, nor with sentiments of benevolence and of justice. To endow them thus would be a contradiction never found in nature. Every animal is destined to fulfil a given task. The task of the carnivorous animals is the destruction of life. Without this they could not live; their very existence is dependant upon the fulfilment of this condition. But they would be obviously unfit for this duty, if all the conditions requisite to its fulfilment did not harmonize. The dreadful fierceness of their nature is one condition; physical strength is another; specialities of organization form a third; and, finally, intelligence enough to direct all these appliances and means to the end for which they were framed. If they were endowed with the feeling of pity, this would mar the harmony of their nature; they would mourn over their prey, and pause ere they destroyed it. If they were gifted with reason, they would be prone to assert their right to universal empire; and if they were endowed with the sentiment of justice—but, not to pursue this, it is obvious that their nature admits of no such changes. Employing the powers which they possess in accordance with the end for which they exist, they obey the laws of their being; and, in the whole round of creation, the same principle applies. This, then, is the one universal law; each creature is good in its kind; each is organized for the fulfiment of a given end; all the conditions for the attainment of that end are in harmony; the happiness of the being depends upon that harmony. Every propensity has its corresponding desire; every desire, gratified in accordance with the entire being of the animal, ends in a pleasure. There is a special provision for this end in each individual case. When the gratification of desire in one animal causes suffering in another, there is a provision by which the least possible amount of suffering, compatible with the fulfilment of the required end, is inflicted. (The ponderous paws of the lion and tiger illustrate this.) We have said pleasure is the great end of sentient life. We have said that a special provision is made to meet the emergencies of each case. If the lion had the bodily form and nervous system of the lamb, this law would be contravened. If the harmless sheep had the bodily strength, the muscles, and fangs, of the tiger, this law would be contravened. Therefore, where there is such a discrepancy, this law does not apply. But no such imperfection can be pointed out, and, therefore, the law is the result of unbounded beneficence and supreme wisdom. And not only must there be harmony in the internal and individual mechanism of each separate organized being, but also in its adaptation to the universe, organic and inorganic, which surrounds it, or the law will fail in this respect: and there is this harmony. Not only is

each perfect *sui generis*, but there is a place for each, and an order in which all stand in relation to other beings; and yet the great law governs all. There is pleasure to the innocent lamb in nibbling the tender grass, or draining its dam of the milk ordained for its use. There is pleasure to the wolf, evidenced in its growl of fierce satisfaction, in mangling and devouring that harmless lamb. And here the law is still supreme. The greatest amount of happiness to each is accompanied with the least possible amount of suffering. *The very fierceness and fury of the wolf constitutes the means employed to realize this.* It destroys life almost instantaneously.

It is not necessary to illustrate the view in all its bearings upon the organic portion of the universe, and what has been stated might seem a wearisome episode, unless it were applied to the eludication of the question with which we started.

To man, then, as the most perfect of all organised beings, having qualities in common with all, with others superadded,—a part of the same created universe, subject to its physical laws, and standing in a definite and fixed relation to those laws,—the topmost link in the chain of being, we return; and applying the common law to that which he holds in common with other beings, we say, that it is intended that HARMONY SHOULD SUBSIST AMONGST HIS VARIOUS PROPENSITIES AND POWERS, and that, in that harmony should be elicited the greatest quantum of good with the least alloy of evil.

Not to weary by speculating what man would have been if he had been differently constituted, we will take a brief survey of him as he is—an animal, an intellectual, and a moral being.

The beasts of the field attain to their gratification, and fulfil their appointed end, in following the simple impulses of their nature, for that is harmony to them. Man gifted with reason, ideality, marvellousness, hope, veneration, benevolence, conscientiousness, must act in harmony with his whole nature. Were he simply to follow the impulse of his propensities, he would violate this great condition of his existence: were he to chain up his appetites, and despise the dictates of his animal nature, he would equally violate this law. Like the several members of a commonwealth, where each is appointed to a certain duty, the several organs of the brain are individually appointed to discharge a special function: it is the harmonious action of each that realizes good to all. It is the office of conscientiousness to sit in the judgment seat, and looking through the intellect, its eyes, to check the tendency to irregularity which the blind propensities manifest. It is the office of the intellect to see and to reason, and to observe the tendency of actions, and without this assistance conscientiousness would be of no avail. Causality and comparison cannot reason without facts, conscientiousness cannot feel without an object; and that object must either be an internal emotion, idealized by the intellect, or an external object presented to it by the intellect.

We have before said that *its power is proportionate to its size*, we now add, that *its emotion of approval or disapproval is*, in a great measure, *dependant upon the direction of the intellect.*

But, in regard to the actions of man, the moral sentiments should reign supreme. They are the harmonizers of all the other faculties, and satisfaction is their immediate result in their own simple action; ineffable happiness in their operation upon all the other faculties. They may be misguided, for they are sentiments, not intellectual powers. They are not the windows of the mind, but its inmost sanctuary. If the light be excluded by reason of imperfect knowledge, they are dark also: if the light be partial, they are dimly illuminated.

Conscientiousness is not *morality*, any more than veneration is religion, or intellect truth. Conscientiousness is not the conscience of theologians, any more than veneration necessarily worships their God, or than intellect assents to their creeds. Conscientiousness is not the moral sense of philosophical writers, because their moral sense is an intelligent principle, and not merely a sentiment. Morality is a science; conscientiousness, veneration, and benevolence, are its foundations; reason builds the superstructure into a temple of universal truth, its ministering priests are the desires of man regulated so as to produce happiness; God was the original architect, and, as such, should be the object of homage.

Morality seeks so to regulate men's actions, that each faculty may be kept in its proper place, and that all may conduce to one great ead. The all-wise Father of all has so contrived, that good, as an end, results from the proper regulation of the means which he has given his creatures. In the inferior animals, we have seen that there is a simple and direct provision made for that end: their instinct is His intelligence acting through them and for them. But in man there is a greater complexity of mechanism, there is a higher range of intelligence. The constituting causes of harmony and happiness in the inferior portions of the creation, would occasion disorder and vice in him. The simple end to be attained is the same—the means to be employed are different. The laws of morality are the laws of the Creator, brought to bear upon human conduct as means for the accomplishment of that end, which is human good. This, it may be not in vain to repeat, includes the harmonious activity of all the faculties, and therefore there can be no cavil as to the highest manifestations of the human mind, evinced in the contemplation of God's works, and the reverential adoration of his majesty. God is the centre of all bliss, from him it comes and to him it flows back, as the waters ever flow into the ocean. In this sense, therefore, but in no other, will we accept Paley's definition of virtue, that it is the doing good in conformity with the will of God. We know nothing of his will but through his works, or from his word, and there must be some test by which we alone can know what is his will; and as his will must necessarily be good, he being beneficent, and blessed, we must search for some general law which shall bear the visible impress of its divine origin—we must see for what end this law was ordained—and when we have met with such a law, and have found it of an all-comprehensive character, and of unvarying application, we may

rest assured that we have ascertained his will, and that by seeking the end which it points out, we shall be rendering acceptable service to him, in the promotion of that good which is the essence of his nature, and the tendency of all his works. Morality is, therefore, a calculation of consequences; whatever tends towards ultimate good, with the infliction of the least possible maximum of pain, is good. Morality therefore includes the two conditions of beneficent intention and beneficent tendency: the feeling gives the intention, the intellect investigates the tendency, but no action can produce ultimate good unless both these conditions are complied with: a moral law being violated, there will be a punishment inflicted either in one stage or another. For instance, a man may give money to a charitable institution from love of approbation alone, and therefore although the apparent tendency may be beneficial, there is the want of beneficent intention; and we may rest assured, either that the money so given will fail to do good ultimately, or, that the man giving it, will evidence the hollowness of his motives at some time, and lay himself open to reprehension. Pain is, therefore, not the end, but the means; pleasure is the end. Where there is more of pain than of pleasure, more of evil than of good, it is a punishment inflicted for the infraction of this law. God is just, therefore the law is just: He is wise, therefore the law evidences wisdom: He is immutable, therefore the law is fixed and stable.

He does not arbitrarily impose the law, as some imagine. It is not for the exhibition of power, that his laws are framed, but for the production of good. Therefore the value of every action is not to be estimated by its conformity to an assumed arbitrary will, because the will is not that of a human despot, commanding because he can compel obedience and gratify self-esteem, but the will of supreme wisdom and benevolence, commanding obedience for the good of his creatures, and enforcing it by penalties consequent upon the actions themselves. The science of morality is therefore the science of the moral government of the universe. It is intellect tracing cause and effect, benevolence disposing the mind in a fit frame to prosecute the enquiry, conscientiousness attaching its emotion of right and of wrong, so that the conclusions of the intellect are not dull and inert abstractions, but thereby become living and glowing principles; and then veneration, looking with reverence to the Author of all, and beholding that good which the intellect has traced out, and conscientiousness has acknowledged, pours forth its aspirations of grateful joy, and thus the whole nature of man, when in harmony, constitutes a living temple for the utterance of the Creator's praise.

Theologians err woefully therefore when they speak of conscience as a *separate, independant, and intellectual principle.* The conscience, which they have to do with, is consciousness. The man in whom conscientiousness is weak, feels not the degradation of depravity. He in whom it is so weak and the propensities so energetic that all his tendencies are to evil, is as much an object of pity and protection as the idiot. *Idiotcy is the absence of intel-*

ligence, and the absence of the moral feelings is the idiotcy of the sentiments.

He is not conscious of guilt, who is incapable of feeling the emotion of conscientiousness. He is not conscious of guilt, whose intellect and whose feelings have been warped by education so as to approve that which is evil in its tendencies. Conscientiousness, be it ever born in mind, is blind. And to expect an exhibition of justice in accordance with the highest notions which we can form of right and wrong, from mere conscientiousness, is as irrational as to expect that a man who had been shut up in a dungeon all his life, should, on emerging into society, be instinctively conversant with the whole round of social duties. Morality, such as we have feebly defined it, is eternal, because the principles upon which it is founded are eternal. But the world had grown hoary before Bentham taught this morality, and he, too, had grown hoary before he fully developed it; and how therefore can we expect that the mere feeling of right and wrong should guide a man through life, with as unerring power as the finger of Deity himself? It is by the conformity of all things to the great principle of utility, that their value must be tested. That utility implying all the agencies which the works of the Creator manifest for the production of good.

We have seen that it is manifest in the conformity betwixt the condition of every organized being and its sphere of action. Each finds its own proper good in the natural activity of its own proper organs.

Is man less an object of care to the Supreme than the beasts that perish? The constitution of his nature affords conclusive evidence to the contrary. By so much more as he is more highly endowed are his pleasures more intense. He is the epitome of the whole creation. He is not the exception to the great law, but its impersonation. As means in the eliciting of all this good, one law of his being is, that the considerations of justice, of benevolence, and of religion, should be paramount. How profound then appears that aphorism of C. J. Fox, "that nothing can be politically right, that is morally wrong." The advocates of all the anomalous institutions are the parties which this law threatens to subvert. The feeble minded, who dare not apply so rigid a test to all the modifications of human opinion and action, the bigots in religion, whose state of mind is such that they are afraid to investigate any truth which would seem to imply the competency of human intellect to reason out a system of morals founded on the will of the Supreme, as evidenced in the creation, the mere man of moral axioms, calculating the value of each act *per se*, and not in its general scope and tendency, or the narrow-minded, who cannot grasp a great truth, are those who effect to deny this doctrine. But phrenology and anthropology will throw a flood of light upon it, by which all the obscurity and difficulty under which the great master laboured, by reason of his imperfect acquaintance with the human mind, will be cleared away. Discarding his theory of mind, we may abide by his principle of morals; we are bound to do so, if we are true phrenologists, for if phrenology be not a cunningly devised fable, it teaches that man will never attain to the full measure of happiness,

requisite to the fulfilment of his high destiny, until all his propensities, sentiments, and intellectual powers, are harmoniously exercised, and this can only be by conforming to the will of the Supreme, and by obeying his laws.

The direct and positive commands of the Supreme, which we find in the Scriptures, have not been quoted. On this occasion the need does not exist. For if revelation mean anything, it means no less the written word of God, than His will made manifest through the works of his hand, and the laws which govern them. The law must speak the character of the law-giver. If God were a vindictive and capricious being, or if he were simply indifferent to the happiness of his creatures, we should find this evidenced in the laws which he has established for their government. But these laws are firm, stable, and immutable; framed with consummate skill, and evidencing the most tender care. Justice and benevolence, directed by all-comprehensive wisdom, are the characteristics of the law. And "as virtue is not the creation of the divine will, but has had everlasting residence in the nature of the Godhead," so is vice temporary, accidental, and not intrinsic. Virtue is as eternal as God, vice perisheth as the things of time. Virtue is a direct emanation from on high, vice ceases with the causes, temporary as they are, which generate it. Virtue has a tendency to increase infinitely, vice is self-destructive. Man was not formed to be unhappy and vicious, but to be happy and virtuous. He is only vicious in proportion as he violates that moral law which should reign supreme over his entire nature. And in order that he may learn that this is the will of Deity, and the source of the highest amount of enjoyment compatible with his finite intelligence, he is taught, by the very framework of his own bodily and mental machinery, that in the right adjustment of the means can he alone realize the object of his being.

Revelation is conspicuous, therefore, in the works and in the word of God. We may not learn all his will through his works, but we learn all that portion of it which relates to our own well-being on earth. And, as the humblest mound points as directly toward heaven as the loftiest mountain, so may we, from the summit of even our limited intelligence, look upward humbly, and yet confidently, towards that haven of future bliss, which the more sublime and lofty pages of Revelation promise to us. Thus, faith belongs to the intellect not less than to the feelings. It is the eldest born of a devout philosophy. When we feel assured that the ways of Providence are stable, and that "God hath no pleasure in the death of the wicked," and "that all things work together for the production of good," an assurance which is founded upon an observation of the whole round of the moral government; and when we recognize in our own nature, however debased by crime, or perverted by defective moral agents, an apparatus exactly suited to the ultimate fulfilment of an harmonious, and, therefore, virtuous and happy course, although nothing but vice and misery should surround us, and earth seem like a howling wilderness; yet, strong in this faith, we might await the dawning of ultimate good, with as much cer-

tainty as, in the darkness of night, we know that the sun will rise at his appointed time.

In conclusion, it is unnecessary to examine the validity of the several systems of ethics which disagree with these views, for if utility, or, in other words, tendency, be the test of action, we by no means deny this very principle to have resulted immediately from God himself. And therefore we should only differ in the sense of a mediate agent and ultimate cause, with those who take the will of God as the foundation of the moral law. But we have endeavoured to show that it is in agency that we recognize the law, and in tendency that we trace it, and therefore we rest upon this as the means, and the good of man as the end, satisfied that in doing this we are guilty of no denial of God's supremacy, for his laws must pre-suppose his will, and therefore his will is an equivalent to the sense conveyed by the word utility. The moral fitness of an action, is its conformity to the principle of utility: the means of ascertaining this fitness, is the intellect reasoning upon its tendencies: the instrument which assists in the process is conscientiousness, which, by its own inherent relation to the objects upon which it is exercised, serves the office of a lengthened calculation of tendencies, calling up an emotion of right or wrong instantaneously when the case is simple, and prompting the intellect to a careful scrutiny when a more complex case presents itself. Besides this it serves other important purposes in the moral scheme, an enumeration of which is not now necessary. Enough has been said, if it have been made clear, to stimulate thought upon this important point; and if the writer have failed, it will be one more strong proof that a conscientious wish to do good, needs to be associated with the mental power of doing it effectually.

IRRESPONSIBLE POWER CONTRARY TO THE WILL OF THE CREATOR.

We declare, without hesitation, that the following is a law of the Creator:—

That man is so constituted, that, unless he is responsible for the exercise of power, he must of necessity abuse that power.

That this law is true, Phrenology demonstrates and all history testifies. Man has an organ of *self-esteem:* this, when gratified by the presentation of those motives, connected with the advocacy of *non-responsibility* to *man*, induces so powerful an activity as to lead the possessor to imagine himself something superior to the rest of his kind: it led to the pride of the French noblesse, which brought so tremendous a punishment upon them from the insulted people: it led, in days of yore, to the oppression of the Roman patricians, that became so galling that the people elected their tribunes to restrain that power: it led to the oppression of our brethren in America, which ended in shaking off the yoke of

England: it has led to the treating Ireland as a conquered country, to the declaration of Lord Lyndhurst, himself, it is believed, a *naturalized American*, that the Irish are "aliens," and, as such, that the cry for justice is to be treated with contempt: it has led, finally, to the exhibitions of the House of Lords during the present session of parliament, exhibitions presented in a most lucid manner by the following communication:—

The Lords have been actively engaged, during the past month, in proving the utter unfitness of our institutions to promote the well-being of the people. The country is essentially a commercial country, yet its legislative power has been held by those who gained it by the sword, and by their descendants, who have partaken of the spirit and the ignorance of their ancestors.

The interests of the people, and their rapidly increasing knowledge, have taken them onward; their rulers, their law-makers, have stood still. We have an extensive, commercial, and, therefore, enlightened people; but our institutions have been thrown up in a state of semi-barbarism, and our laws have been huddled together during the struggles of violence to oppress, or the temporary successes of the oppressed.

The sword gained for the hardiest barons, that is, for *the chief robbers*, large grants of land, one of the two elements of all wealth; and the power which that, in bye-gone ages, carried with it, gave the legislative power into their hands, and preserved to them, who were bred in violence, and lived in a state of irresponsible and, therefore, corrupting inequality, an ascendency injurious to the social progress.

Government in this country has grown up *over* the people, and not *from* the people. The two great parties, the whigs and the tories, have, between them, crucified the interests of the people: as parties they have been equally interested, and still are, in maintaining this unnatural position: they have equally partaken of the aristocratic spirit, and their policy has been to play together a game of political chess for their own profit, with the people for chessmen, and the public interests for the stake.

Had the question, "*what are you playing for?*" been honestly answered, the reply would have been "for power, patronage, places, and pensions; for the right to officer the army; to give our lordlings commissions and governorships; for the power to give to our families *one-tenth of the produce of the whole kingdom*, which is enjoyed by the hierarchy of the STATE SECT; for the right to officer the navy, plunder the colonies, and pension our mistresses upon the people." And although Lord John Russel is reported to have spoken with some degree of decision and firmness on the conduct of the Lords, in mutilating the Irish church bill, (and but a slight degree of warmth in so cold a man is much thought of,) yet, in our opinion, it is with him and with his party but mere talk.

At the end of the session, it is thought likely to assist in carrying the whigs over the recess, he is represented to have spoken thus: "If (said he) the members of the House of Commons, the

representatives of the people of the empire, choose to go to the bar of the Lords, and in humble guise recant their former resolution, agree to the rejection of its principle, acknowledge their error, accept the lesson of wisdom and policy taught them by the Lords, and submit to their dictation, I can only say that I would not accompany them. *(Much cheering.)* We are prepared to stand upon the principle we have professed. *(Hear, hear.)* We maintained that that principle was essential to a final settlement of the tithe question when we were out of office, and if, while we are in office, the House of Commons thinks proper to affirm an opposite principle, amounting to a denial of that which we asserted, of course it will be our duty to resign, and to pretend no longer to govern the councils of the country." *(Cheers from all sides.)*

We do not consider this as anything, because he and Lord Melbourne have often *said* much more—words are of the feminine gender, deeds of the masculine: in this sense the whigs have never arrived at manhood. Why is it that the ministry has lent all its power to pass the bishops' bill? The tories and the bishops have united strenuously and perseveringly in rejecting all the measures that the professing and talking whigs have introduced of a liberal character, and the whigs have, nevertheless, steadily supported that bill which is to increase the number of bishops, and the object and tendency of which are to strengthen the state sect; to increase, largely increase, the patronage and consequent influence of those bishops; to fasten an enormous and crushing church establishment more firmly upon us; and, above all, to increase its legislative power, by adding two new bishops to the irresponsible part of the law-makers—THUS INCREASING THE NUMBER OF CERTAIN VOTERS AGAINST RELIGIOUS FREEDOM.

Such bishops *must* be enemies to religious liberty, because an established sect is a *privileged* sect; and PRIVILEDGES *to any are* RIGHTS *robbed from the many.* Privileges are made out of exclusions; and the whigs, who talk of being friends to liberty, and promise the dissenters relief from church rates, wholly neglect their promise to them; and Lord John Russel, their cold and aristocratic organ, told the liberal members, whom he called together at the treasury, that he was bound in honour to pass the bishops' bill! In possessing the whigs as a ministry, we have men professing to love reform, and who talk of it as a part of the tactics of their party; but the spirit of the aristocracy is strong, decisive, and over-ruling in their hearts; we trust them not, but they must bide their time, and that we think will not be long. The cause of the people, which is the opposite of the cause and interest of any priviledged class, is gaining strength and power; for although the reform bill has not given freedom, nor an extent of franchise equal to that to which the knowledge of the people and their fitness for self-government entitles them, yet it has tended to diminish the power of the aristocracy to work positive evil, and the Lords are now driven in their legislation to oppose the adoption of good measures; they are awfully increasing this session the negative quantity of their mischief; they are checking the flow of wise and just legis-

lation; yet, like those who seek to check the natural course of a river, they impede its gradual flow, but to be inundated by its accumulated and then overwhelming power. As water will find its level, so knowledge will ascend to its own altitude. The people have greater knowledge of the art of self-government, and of the means of social progression, than the priviledged classes have of the art of ruling or guiding.

Mr. Ewart has given notice, in the House of Commons, of his intention in the next session to move for a return of all the bills sent to, and rejected by, the other House of Parliament; and also the number of bills that had been sent down to that House by the House of Lords which had shared a similar fate. This is a most important motion, and we regret that it is not at once made, and the return procured. The return will forcibly illustrate the evil of irresponsible and ignorant legislators, and the expence and injury of two legislative chambers.

It will show the truth of the observation reported to have been made by Mr. O'Connell, in the House of Commons, that the name of freedom will perish in this country, unless a thorough and searching reform is made in the House of Lords.

In losing the Irish church bill, though it defers a partial good in postponing the adoption of the abstract principle, namely, the declaration *that the surplus set apart for the priests' revenue, of the dominant sect, should be appropriated to the education of the people*, we have lost but little, for there would have been no surplus by the operation of that bill for many years to come. By its present rejection the justice of the principle will be further agitated, and the necessity of abolishing all compulsory support of religion, of pensioning off the present priesthood, and applying the whole of the property which the priests of the hierarchy of one sect now absorb, will become a paramount conviction: the people will become satisfied of the necessity of sewing up the paunch they cannot satisfy, and of securing the selection of legislators from the commercial and industrious classes, instead of idle and useless landlords. In other words, recognizing the law already propounded, THAT MAN IS SO CONSTITUTED, THAT UNLESS HE IS RESPONSIBLE FOR *the exercise of power*, HE MUST OF NECESSITY ABUSE THAT POWER: and that, as the House of Lords is, by its *constitution*, an *irresponsible* body, evils *must* result from it, as long as that constitution remains unchanged.

OBEDIENCE AND HAPPINESS—DISOBEDIENCE AND MISERY. MIS-TRANSLATIONS OF THE SCRIPTURES. JOHN BELLAMY'S INTERESTING PETITION.

In the preceding numbers of *The Christian Physician*, several Essays have been published with the view of establishing that an intimate connexion exists between obedience to the laws of the natural world and happiness, and disobedience to those laws and misery. These Essays have, it is hoped, had some effect in making clear to the readers, that the Creator's benevolence is conspicuous,

and that the very miseries arising from the violation of the laws, are exhibitions of benevolence: because it must, on reflection, be evident that, if benefits were not ensured by obedience to *fixed laws*, no beneficial application of these laws could take place: in other words, suppose at one day a man putting his body into the fire was not burned, and on another day he is, what would result? An uncertainty that would occasion a much greater amount of suffering than is at present produced by the violation of the law. The very certainty of punishment induces obedience: and therefore as happiness is obtained from obedience, the punishment must be looked upon as a kindness, as a temptation to induce man to obey, and thus to gain the benefits of obedience.

The Essays already published have been presented with the view of making some of these laws, relating to man's constitution as a *physical* being, known; and, month after month, additional laws will be brought forward, and the benefits of obedience and the misery of disobedience will be detailed. Still there are many laws of which we are at present ignorant: this circumstance imparts a stimulus for fresh exertion, and diligent attempts will be made to discover the laws of the Creator. To do this we must study the volume of creation with diligence. In reading this volume, man often makes mistakes; and these mistakes are highly injurious to him: because they not only prevent the discovery of the laws themselves, but also occasion the production of much evil, by the very attempt to benefit himself, by putting into action what he considers the Creator's laws, but which really are his own *mistaken deductions*, and not laws at all. If such evils have originated from mistaking the language written upon the volume of creation, how much more serious must be the errors connected with the mistaking the language of the *volume of revelation;* this volume communicating to man the laws of the MORAL government of the universe.

And as man's character, as a moral and religious being, is that in which he is superior to the other parts of the animal creation, mistakes in reference to the laws, regulating that relationship in which he is placed to the moral Governor of the universe, must be attended with the most disastrous results, from the very circumstance that these mistakes affect man in the relationships in which his real elevation consists.

It is true, that the injury arising from the violations of these relationships, not being so *immediately* apparent as that arising from the violation of the physical laws, is often not sufficiently appreciated; but the effects must occur, and these effects, from the very silency of their operation, make the greater inroads upon human happiness. Like insidious diseases, not attended with *much pain*, make a progress which, when they are developed, it is impossible to resist, because they have had time to take so strong a hold upon the constitution, which they would not have been allowed had pain attended their approach, (the same would have served as a warning,) so, in the case of the violation of the laws referred to, the influence, the injurious influence, has corrupted

the moral principles of man's constitution, and the corruption, of a sudden, manifests itself under the most distressing aspects.

From the *volume of revelation*, therefore, man is to derive the laws, which constitute the relationship in which he is placed to his Creator and to his *fellow man;* in other words, his *religious* and *moral* relationships. It is not denied that much information on these subjects may be gathered from the volume of creation; indeed, we have no knowledge of the character of God, but from his works and his word.

"Our information upon this head from his works is very limited; indeed, so much so, that we cannot be justified in making our experience thereupon, a standard of truth. Chalmers's reasoning on this subject is conclusive: "To assign," says he, "the character of the divine administration from the little that offers itself to the notice of our own personal observation, would be far more absurd than to infer the history and character of the kingdom, from the history and character of our own family." Our knowledge from the word of God is far more extensive. Indeed, therein we are taught the real character of the Deity; therein he who fills all is made known: a view of his immeasurable attributes, under the veil of some interesting and important facts, is presented."*

It is to revelation, therefore, that we must go to get specific knowledge respecting the moral government of the universe.

Many persons have some mysterious associations with the word revelation.

It may, therefore, be advantageous, in reference to the use of this word REVELATION, to introduce the following remarks of Campbell. "With the exception of those things which pass within our own minds, and which we learn solely from what is called consciousness, and except the deductions made from self-evident or mathematical axioms, all our *information* relating to fact or existence of any kind, is from without. Hence all our knowledge of arts, science, languages: of history, philosophy, and every thing in which human life is concerned."

"This information may come from three sources: man, creation, and God. "REVELATION means no other than *information from God*; and whatever human knowledge we derive from the testimony of our fellow mortals, is, if I may be allowed the expression, *a revelation from man.*" Having thus explained the nature of revelation, the writer proceeds to show that it is necessary man should be able to read the revelation itself.

"In what concerns revelation, reason has a twofold province: first, to judge whether what is presented to us as a revelation from God, be really such or not: secondly, to judge what is the import of the testimony given. For the former of these, first, the external evidences of christianity offer themselves to our examination, prophecy, miracles, human testimony: and then the *internal*, arising from the character of the dispensation itself, its suitableness to the rational and moral nature of such a being as man."

---

* Evidences of Christianity deduced from Phrenology, by John Epps, M. D.

"As to the second point, the *meaning* of the revelation given: if God has condescended to employ any human language in revealing his will to men, he has, by employing such an instrument, given us reason to conclude that, by the established rules of interpretation in that language, this meaning must be interpreted. If the words of God were to be interpreted by another set of rules than that which the grammer of the language, founded in general use, presents us, with no propriety could it be said, that the divine will is revealed to us, till there were a new revelation furnishing us with a key for unlocking the old."

It is the duty of man to seek to understand the will of the *revealer*, by reading his *revelation*. Not only is it his duty but his *happiness*. Because, as it has been proved that the violation of the laws of the physical creation is attended with injury, and obedience thereto with benefit, so obedience to the laws of the moral creation must be attended with benefit, disobedience with misery.

The revelation, therefore, must be studied. We find it: and observe that the information was conveyed in two languges, the *Hebrew* and the *Greek*. The Hebrew and the Greek Scriptures have, however, been *translated*, that is, turned into another language. The English translation becomes, therefore, a most important document; and it is very necessary that, previous to the search after the laws regulating the moral government of the universe, we should ascertain whether the translation be correct; otherwise we may, supposing the translation to be incorrect, be deducing from the translation what we may consider as *laws*, which actually are no *laws* at all: and thus, mistaking the will of the Creator, produce to ourselves and to others much misery.

On examining the translation, many points of information are to be met with, which it is very difficult to believe are the product of the divine mind, that dictated the rest of the volume: it becomes, therefore, most important to consider whether the translation is likely to be correct in these particulars.

It is to be hoped that the reader will not, considering the nobleness of the object in view, namely, the *production of happiness by ascertaining what the will of the Creator really is*, be terrified from pursuing this investigation. It is true that all attempts to make new translations, or to improve old, have been considered as dangerous,* as having the tendency to shake the faith of the people, by invalidating the translation then in use.

In reference to this dread, what can be better than the following remarks of the author already quoted. Those who consider religion as no other than a political engine (too many in our days, Ed.)

* The following are the remarks of Jerom himself, in reference to his translation, which has since been so generally received; they are to be found in his letter to pope Damascus, prefixed to the translation of the Gospels: "Periculosa presumptio judicare de cœteris, ipsum ab omnibus judicandum: senis mutare linguam, et canescentem mundum ad initia retrabere parvulorum. Quis, enim, doctus pariter vel indoctus: cum in manus volumen assumpserit: et a saliva quam semel imbibit, viderit discrepare, quod lectitat: non statum erumpat in vocem, me falsarium, me clamans esse sacrilegium, qui audeam aliquid in veteribus libris addere, mutare corrigere."

have reason, I own, to be alarmed. But those, on the contrary, who are persuaded that the religion of Jesus is founded in truth, and consequently, divine, are inexcusable in their fears of canvassing it as much as possible. It is falsehood, not truth: it is guilt, not innocence, which studiously excludes the light, and flies examination. This our reason teaches; this our religion also teaches. "*For whosoever doeth evil*, says our Lord, John iii. 20, 21. hateth the light, and shunneth it, lest his deeds should be detected; but he who obeyeth the truth, cometh to the light, that it may be manifest that his actions are agreeable to God."

Having thus met the difficulty which may arise in many minds, the following petition may be presented to the reader: to this petition the attention is earnestly requested; the contrasted passages will demonstrate the importance of a correct translation of the Scriptures, by showing how different is the mind of God when properly understood, than as represented in the common, the authorized version of the Scriptures.

The Petition of John Bellamy, of Wells Street, Gray's Inn Road;

Humbly showeth,—That having seen the direful effects of certain deistical writings, which, by the enemies of the christian religion, are circulated, and are circulating, in every part of the British Empire, threatening a subversion of the pure religion of the Bible, and the worship of God; having, for a series of years, given his attention to obtain a knowledge of the Hebrew language, in which the sacred Scriptures were given, and satisfied himself that they are now as pure as the autograph of the Hebrew lawgiver; having also given incontrovertible authority to prove that the authorized version is not translated from the Hebrew text, but from translations; for the translators in their own preface say, what they had proposed to themselves, and what course they held in this their perusal and survey of the Bible, on which occasion they never thought from the beginning that they should need to make a new translation, nor yet to make a bad one a good one; but their endeavour and mark was to make a good one better; or, out of many good ones, one principal good one.

That your petitioner, having had the approbation of some learned bishops, and many eminent clergy of the established church, was advised to begin a new translation from the Hebrew text only; which text is now allowed to be the only true standard of the inspired volume, in proof of which see the report of the Select Committee on the King's Printers' Patents, with the evidence ordered by the House of Commons to be printed the 8th of August 1832. In this report it is deemed most important to distinguish the different words applied to the Deity in the original Hebrew. Bishop Horsley regrets particularly that the translation did not always retain the word Jehovah instead of Lord, as it concerns the doctrine of the trinity, and the whole doctrine of the divinity of Christ, (p. 68.) But, in the new translation, the word Jehovah is retained instead of Lord. This proves that the translators did not

translate from the Hebrew text, but from the imperfect Latin and Greek translations; hence the word Lord, from the Greek word Κυριος (*Kurios*), found its way into the English Bible in every place where Jehovah occurs in the original Hebrew.

Your petitioner, in order to give this Honourable House a comprehensive statement of his design in this daily labour, which has been his sole employment for above forty-eight years, begs to state a few passages of the authorized translation contrasted with the corresponding verses in the new translation.

Gen. xix. 36. Thus both the daughters of Lot were with child by their father.	Thus both the daughters of Lot conceived unknown to their father, (by marrying among the idolaters of Zoar.)
Amos iii. 6. Shall evil be in the city, and the Lord hath not done it?	Shall evil be in the city, and Jehovah hath not required it?
Gen. vi. 4. There were giants in the earth in those days.	The apostates were on the earth in those days.
Ibid ver. 6. And it repented the Lord that he had made man on the earth, and it grieved him at his heart.	Yet Jehovah was satisfied that he had made man on the earth, though he (man) idolized himself at his heart.
2 Kings viii. 10. Go, say unto him, Thou mayest certainly recover.	Go, say unto him, thou shalt certainly recover.
1 Kings ii. 9. But his hoary head bring thou down to the grave with blood.	But his hoary head bring thou not down to the grave with blood.
Jer. xx. 7. O Lord, thou hast deceived me, and I was deceived; thou art stronger than I, and hast prevailed.	Thou hast persuaded me, O Jehovah: thus I was persuaded; thou hast strengthened me, and hast prevailed.
Song i. 14. My beloved is unto me as a cluster of camphire in the vineyards of Engedi.	Abundant is the atonement of my beloved before me in the vineyards of the sacrificial lamb.
Ch. vii. 1. How beautiful are thy feet with shoes, O prince's daughter: the joints of thy thighs are like jewels, the work of the hands of a cunning workman.	How comely were thy goings forth, dry shod daughter of a prince: thy quarters went about with ornaments, the offering of the hands of the faithful.
Ib. ver. 9. The roof of thy mouth is like the best wine.	And thy judgments as the best wine.
Ch. viii. 3. His left hand shall be under my head, and his right hand shall embrace me.	His protection is because of my chief: therefore his power will support me.
Ib. ver. 11. Solomon had a vineyard at Baal-Hammon; he let out the vineyard to keepers.	A vineyard was concerning peace, by the Lord, of the similitude given to the vineyard-keepers.
Ch. iv. 13. Camphire with spikenard.	Reconciliation with spikenard.
Ib. 4. Thy neck is like the tower of David.	Thy strength is as the tower of David.
Duet. xxviii. 68. There ye shall be sold unto your enemies for bondmen and bondwomen, and no man shall buy you.	There ye shall prize (offer) yourselves for bondmen and bondwomen unto your enemies, but none shall purchase.

In conclusion, your petitioner has to state that he has been engaged for forty-eight years in this work constantly; that he has already printed and published the new translation of the Old Testament, from the beginning of Genesis to the end of the Psalms; and that he has completed the translation in corrected manuscript to the end of Malachi.—Your petititioner therefore hopes that your honourable house will receive his statement as not unworthy of its attention in a national point of view, &c. &c. &c.

Essay X.—The Human Body. *The Spine. The Spinal Cord.*

The BRAIN, the most important part of the nervous system, is contained within the *skull*. The SPINAL CORD, second in importance, is contained within the *spine*.

The skull has been already partially described, (p. 61, vol. I.) The spine, supporting the skull, is now to be noticed.

The spine is a constituent of that, usually designated the TRUNK; this consisting of the *spine*, the *pelvis* or bason, forming and formed in part by the hips, and the *thorax* or chest.

The spine itself is that long pile of bones, extending from the inferior surface of the head to the point of termination between the hips, supporting at that termination the last intestine, described at p. 117, vol I.

The spine is *perpendicular*, but not straight, having four or five remarkable bends.

It first bends at its uppermost part *forwards*, thereby supporting the œsophagus, (pp. 43, 44. vol. I.) and the great vessels of the head. It then bends *backwards*, thereby increasing the cavity of the chest, so as to give room for the action of the heart and the lungs, contained within that cavity. Its third bend, still lower, is *forwards*, to support the parts contained within the cavity of the abdomen. Its fourth bend is *backwards*, so as to make the cavity of the pelvis as large as possible. Its fifth bend is *forwards*, so as to support the last intestine and the parts adjoining.

Notwithstanding these bends *forwards* and *backwards*, there are no bends *sideways*, at least in a well-formed spine; and what is interesting to remark is, that, though of this curved form, the position of the various curves is so contrived, that the centre of gravity of all that part of the spine, which sustains any considerable weight, falls in the middle of the common base.

This spine, being situated so as to form the central support of the body, must admit of *motion;* but, at the same time that motion is required, *strength* is as necessary. The difficulty is to combine *strength* with *motion*. To effect motion, the spine could not be made of *one undivided* texture, unless that texture was *elastic;* and then, it is evident, it would not be able to support the weight of the head, and of the other parts which it has to sustain: besides being then unable to afford a fixed point on which they could rest, so as to gain power in performing actions. It must be made of separate pieces; but then the disadvantage arises, namely, that these separate pieces might be liable to displacement. The Creator, however, has beautifully contrived the structure of the spine, so that both purposes are gained, namely, *strength* and *ease of motion*.

The spine is composed of separate bones: these separate bones are called *vertebræ:* these vertebræ are generally collected into two groups, the *true* and the *false;* the true having motion, the false not having motion.

The true vertebræ are twenty-four in number, constituting, by their union, a long pyramid, with its base at the lower end.

The false vertebræ, which contribute no opportunity for motion to the trunk, are joined together, forming an inferior pyramid, the base of which is above, and which consequently meets the base of the true vertebræ. The apex of this inferior pyramid is consequently at the termination of the spine, and the bone forming it is called os coccygis, the bone of the coccyx.

Each vertebræ is composed of a *body* and *projections*, technically called *processes*.

The body is the thick, spongy fore part, convex before, thereby presenting a rounded surface, over which the parts, resting on the vertebræ, can readily move; concave behind, and generally horizontal and plain on its upper and lower surface.

And as this spongy substance would not be sufficiently strong to bear the various shocks to which it would be liable in the various motions of the body, a *ring of bone*, firmer and harder than the other parts of the body, is placed round the edges of the body of the bone, and thus protects it.

But hard bones, acting upon one another in the motions of the body, would be very inconvenient, and injuries might result. To obviate this inconvenience, and, at the same time, to facilitate motion and to promote the elasticity of the spine, a peculiar contrivance has been adopted: between the bodies of each two adjoining vertebræ, a substance, in nature between cartilage (gristle) and ligament, (a very strong substance,) is interposed: this substance consists of concentric curved fibres, the outermost of which are the most solid and hard, gradually becoming softer to the centre, when these terminate, as it were, in a kind of glairy liquor. This, called *intervertebral substance*, is capable of being compressed: the central liquid point being a kind of pivot, on which motion can readily take place.

Motion being thus provided for, the means by which firmness is realized may now be noticed.

To understand how this is effected, the following facts are worthy of notice.

From each side of the body of each vertebræ, a bony bridge is produced backwards and to a side from the posterior extremity, of which one slanting projection or process rises and another descends, thus making four, generally called *oblique*. The smooth side of these processes is covered by a smooth cartilage, and, (the provision is worthy of notice,) the two inferior oblique processes of each vertebræ are fitted to, and articulated with, the two superior oblique processes of the vertebræ below.

Besides these processes, another process arises from between the superior and inferior oblique process of each side. It proceeds laterally, and hence is called a *transverse* process.

There is another process in addition to these. From the back part of the roots of the two oblique and of the transverse processes of each side, a broad oblique bony place is extended backwards, and where these meet, the seventh process, called the *spinal*, because

it is generally sharp pointed, and narrow edged, takes its rise and stands out backwards.

It is from the last described process that the spine derives its name; and it is this process that is seen projecting on the back part of the neck, on bending the neck and the head forwards towards the feet.

By these processes, the bones are kept closely together: being additionally protected in their position by a ligament, lining all the internal surface of the spinal processes, as well as of the bodies of the vertebræ; and by particular ligaments, connecting the process of each vertebræ with those of that contiguous to it. Such are a few of the provisions for firmness.

The true vertebræ are generally arranged under three heads; namely, those forming the neck, called the *cervical*, (cervix meaning neck); the *dorsal*, those forming that part of the spine, called the back, (dorsum); and the lumbar, those forming the part called the loins.

Each of these true vertebræ has some peculiarities; all of them are interesting, and tend to impart the requisite degree of strength, and the proper amount of motion. These peculiarities cannot now be noticed. A few particulars in reference to the *two uppermost* vertebræ it is necessary to record.

The head has very numerous motions to perform. The most common are those of *bending* the head *backwards* and *forwards*, and the *rotatory motion*.

To render these motions effectual and safe, required great skill; more particularly as injury to the spinal cord, which at the upper part of the neck is more exposed than at any other part, is especially to be guarded against: since pressure on that important part would be injurious to health, and beyond a certain extent, destructive to life.

As to the means adopted to obtain the benefit, and to avoid the injury, the acquaintance will be most easily obtained by a description of these two vertebræ.

These two vertebræ are called the *atlas*, and the *dentator*.

The atlas is the first vertebræ. It is characterized from the other vertebræ by not having a body. Instead thereof, it consists of a bony arch; in the convex fore part of which a small elevation is seen for the insertion of muscles to move the head. The back part of the arch is peculiar, being *concave*, *smooth*, and *covered with a cartilage* in the young, and this is for the reception of a process belonging to the second vertebræ, to be presently noticed. On each side of this hollow, formed by the concavity, a small rough sinuosity is observable, also two protuberances to which the ligaments, that bind the process of the second vertebræ, just referred to, in its place, are inserted, thus preventing any injury to the spinal marrow in the flexions of the head. For it is to be remembered, that if this process were free, it would press upon the spinal marrow, and theredy destroy life.

To be continued.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[*ανθρωπος*, anthrōpos, *man*, and λογος, logos, *a discourse.*]

No. 2.] OCTOBER 1, 1836. [Vol. II.

PHRENOLOGY IN ITS APPLICATIONS.

In the preceding Essays the general principles of Phrenology have been developed; the different organs have been named, their localities described, the functions explained, and the uses and the abuses detailed. In some future Essays it is proposed, with the view of establishing still more firmly the conviction of the truth of the principles and the facts of Phrenology, to trace the development of the nervous system from the zoophyte up to man; in which it will be rendered apparent that every successive development of the nervous system, is attended with a corresponding augmentation of functions belonging to the individual thus endowed with this augmented development. These Essays will be commenced in the next Number, and will be illustrated with lithographic drawings or wood cuts, if the circulation of this, and the preceding Number of the New Series, justifies the increased expence.

In the meantime the following Essay, on the application of Phrenology to Education, will not be useless; but will, it is hoped, help to demonstrate that the uses of Phrenology, when applied to the purposes of life, are of the highest order.

PHRENOLOGY AND EDUCATION.

Essay read before the Anthropological Society, by John Epps, M. D. *on September 1st*, 1836.

Man comes into this world the most helpless of beings. The little chick, when escaped from its shell, begins forthwith to pick up seeds, feeding itself. The little duckling waddles to the water, using its beak in providing for its necessities. The animal creation come into the world, for the most part, dressed: their clothing, too, is suited to the climate. Thus, the dogs of Guinea, Indian sheep, and the African ostrich, are so destitute of covering as to appear almost naked; their climate is hot; whereas the Esquimaux dog, and the sheep of Iceland, have a warm coat, composed both of hair and wool, because they inhabit a cold climate. We find fur, the clothing of animals in the north; wool, in temperate regions; and hair, in torrid. Nature prepares the swaddling bands. But *man* requires to be fed, clothed, and protected by others: he cannot suit himself to the varying circumstances to which he is exposed: and parental care is constantly necessary to avert the

evils to which he would be liable, from his inaptitude to meet these varying circumstances. His ignorance is great: his instincts seem to be, compared with those of the other parts of the animal creation, imperfect.

In a few years time the helpless individual becomes clothed with strength, providing for his own necessaries, and for those, helpless as he once was, by whom he is surrounded. We find this ignorant being, adorned with intelligence, grappling with difficulties, overcoming obstacles, making acquisitions and realizing some bright objects, which he might have looked at in his youth as objects of fancy, rather than of possession. We perceive him, in his powerful intellectual exercisings, becoming acquainted with the *laws of nature*, and turning his acquaintance to practical results, by bringing all the powers of nature to his use. We behold him, by the aid of steam, making the winds and the waves his servants: enabling him to travel over all the parts of the *physical* world: enabling him to produce works of ingenuity and skill, not less wonderful than useful. We perceive him, by the aid of his mighty mind, travel through the wide regions of intellectual space a lengthened journey, in which, like a traveller, he refreshes himself by the nutritious food afforded in such abundance at the depositories of knowledge and of wisdom, to be met with in such journies. We behold him returning from his journey, and communicating to us the laws which regulate the universe: even those laws which constitute the relationship between him and his Creator: and developing views which, when acted upon, will make the moral dessert to blossom as the rose.

Great is man *intellectually;* so is he *morally* or *immorally.* He becomes a monster in sin, or a beacon of light shining more and more to the perfect day of moral meridian sunshine. We have seen both: we have seen men whose only thought seemed to be the devising new sensual delights for their own selfish gratification; and we have seen those, who, like a Howard, a Fenelon, a Henry Martyn, an Oberlin, a Schwartz, a Man of Ross, have made every spot on which they trod fragrant with the fruits of benevolence, offering thus beautifully a perpetual incense of grateful testimony to their moral worth.

Such is man, and it is a grand sight to contemplate him. It is grand to view him acting upon *physical* matter, but it is grander to observe his *intellectual* operations; and, still grandest, to behold him in his mighty moral struggles. It is a grand sight to contemplate the steam engine, paving its way through the ocean to reach distant parts, disregarding winds and tides; but it is a sublime view to behold the engine of mind marching forward, with the steady but well-ordered strides of just reasoning, towards the establishment of a grand principle of truth, despite of the winds of prejudice and the waves of opposition, raised by ignorance and pride.

Such are the states under which man is to be beheld. What a contrast between the *infantile* and the *manhood* state. How great is the difference: the helplessness of the one and the power

of the other: the ignorance of the one and the knowledge of the other. The acorn and the oak do not present a greater difference.

What then is the cause of the difference? It is EDUCATION. What mysterious thing can this be, the producer of these wondrous changes? Education! What is Education? Few, alas, understand what Education is. Most think they do; but this very thought prevents them from really knowing what is this developer of *physical*, *intellectual*, *moral*, and *religious* power.

It is our intention to examine this important agent, Education.

Education may be viewed as a *science* and as an *art:* as a science, it teaches the *laws* regulating the action of external influences upon the human mind; and as an *art*, the application of these laws so as, adopting the words of that most excellent of all writers on the Philosophy of the Human Mind, Dr. Thomas Brown, to train "the ignorance and the imbecility of infancy into all the virtue, and power, and wisdom of mature manhood; and to form a creature, the frailest and feeblest which heaven has made, the intelligent and fearless sovereign of the whole animated creation—the interpreter, the adorer, and almost the representative of the Deity."

It is evident, then, that education refers principally to man's distinctive attribute, the *mind*. There is an education, belonging more particularly to the *body*, which has been called *physical*. And a most important part of education this is; since, to have the mind in the highest state of healthy activity, it is necessary to have the body in a state of health. Hence the old adage—

"Mens sana in corpore sano,"

is always to be regarded as a desideratum; and the two states are to be considered as *necessarily* conjoined. I say, necessarily conjoined, because there is a prevalent notion that literary and talented men are sickly men; in fact, some persons seem to think that a sickly countenance, and an emaciated form, constitute the outlines of intellectual beauty; and also, it has been urged in opposition to the importance of physical education in producing the *bodily* health necessary for the manifestation of *mental* health, that we often see in death-beds a vivid perception, and an intellectual and moral acuteness quite astonishing. But then, let it be remembered, that these are not dependent upon the body being in a debilitated state simply; but upon the circumstance, that, on such occasions, those flimsy cobwebs that come between the soul, when busily occupied with the active engagements of life, and the realities of the spiritual world, are swept away by the approaching hand of death, which, previous to the final close of existence, often is permitted to remove those barriers, that hitherto had prevented the full perception of the beauty of Divine Love, which is heaven; or of the misery of dominant selfishness, which is hell.

We, therefore, in passing over physical education, do not do so on account of its unimportance. We do so, because, to understand the fulness of the truths therewith connected, we must understand

many matters connected with other sciences relating to the human body, which we have not time or opportunity to enter upon.

The education to which our attention is to be directed, is that relating to the *mind;* and, referring to this, we shall introduce as the basis of our remarks, the science of Phrenology.

The grand principles on which Phrenology rests, are 1st, THAT THE BRAIN IS THE ORGAN OF THE MIND: 2nd, THAT THE DIFFERENT PARTS OF THE BRAIN HAVE DIFFERENT FUNCTIONS OR DUTIES ATTACHED TO THEM: 3rd, THAT THE SIZE OF THESE PARTS, ALL OTHER THINGS BEING EQUAL, IS AN INDEX OF THE POWER OF THE FACULTIES, THEREWITH ASSOCIATED: and 4th, THAT WE CAN BY AN EXAMINATION OF THE EXTERNAL CONFIGURATION OF THE HEAD, ASCERTAIN THE DEVELOPMENTS OF THE PARTS BENEATH.

Upon the *facts* and the *reasonings* connected with these principles, a true system of education must be founded.

Phrenology, then, is considered as essential to the foundation of, and to the carrying on, a proper system of education; since, to adopt the words of a certain author,* "Phrenology being the true science of human nature, every thing referring to this nature, must be better understood by those individuals in possession of this science, than by others. Every one, who has examined the progress of scientific truth, is aware of the mighty influence therewith connected. The mind is freed from error; light is diffused, where darkness previously existed; and the general state of society has been altered and improved.

"If these have been the results of the establishment of the inferior sciences upon solid bases, what benefits must accrue from the science of *mind*, when that science is founded in truth.

"Phrenology is such a science. It is a sun—human nature the world it illuminates; which nature, wherever existing and under whatever aspects seen, must feel the benign and quickening influence of its beams."

In human nature there two great enemies to happiness—error and vice; error relating to the intellectual portion, vice to the moral part of that nature. These, when once developed, are almost beyond cure. A knowledge of human nature, and Phrenology affords that knowledge, will enable us to detect the sources of error, and the first buddings of vice; and consequently must be of the greatest service. For prevention is better than cure.

In order that the thoughts to be brought forward, may be more easily remembered, they will be brought forward in illustration of and in connection with the following principles:—

1st. THAT MAN HAS CERTAIN FACULTIES.

2nd. THAT THESE FACULTIES ARE ARRANGED IN A CERTAIN ORDER.

3rd. THAT EDUCATION CONSISTS IN THE DRAWING FORTH OF THESE FACULTIES.

4th. THAT EDUCATION TO BE GOOD—PROPER FOOD, AND FOOD PRESENTED IN A PROPER WAY, AND AT PROPER SEASONS, MUST BE PREPARED FOR THE FACULTIES.

---

* Horæ Phrenologicæ.—Sold by Palmer & Son, 18, Paternoster Row, price 2s. 6d.

5th. In connection with these there are other incidental propositions.

THAT THE PAST AND THE PRESENT SYSTEM OF EDUCATION CONSIST, IN A GREAT MEASURE, IN THE PRESENTATION OF IMPROPER FOOD, OR, IF OF PROPER, THAT IT IS PRESENTED EITHER IN AN IMPROPER WAY OR AT IMPROPER SEASONS.

THAT IF SUCH BENEFICIAL RESULTS HAVE OCCURRED, NOTWITHSTANDING A BAD SYSTEM, WHAT BENEFITS MUST ARISE FROM A GOOD SYSTEM OF EDUCATION.

In regard to the first proposition, that *man has certain faculties*, it is necessary to make some remarks; although, at first sight, its truth appears so palpable as hardly to need illustration, to require any proof; and that, in fact, to occupy any time upon it would be a waste of words. This, however, is not the case. Few are aware of the importance of Phrenology, in establishing this as a truth: for there can be no hesitation in asserting that, till Phrenology gave its sanction to this, an opinion, it is allowed, generally existing, no positive statement could be made of the existence of certain faculties. It is true, that the "*principles of human nature*" are continually mentioned in works relating to the human being; but these principles, if defined, could never be demonstrated, because so far from being looked upon as "principles," these so called were considered by many as mere "consequences" of education; in other words, the fruits of education itself. So far from being the germs which education develops into beautiful trees, they were considered the full-grown plants, begotten by education. In fact, we are taught in the present day, that the differences among men are altogether the *results of circumstances*. And this perhaps might be allowed to its full extent, if the advocates of such an opinion would allow all the circumstances, the most important of which is the *existence of certain faculties*, quite independant of any education whatever. There is a *soil:* education does not *create* the soil; but merely *renders it productive*.

But this cannot be proved without Phrenology. And how can Phrenology? The answer is simple. Phrenology gives a *physical* demonstration, by showing that certain powers or faculties of mind, are merely functions belonging to *certain organizations*, called *parts of the brain*. No one can gainsay this. These disputants pretend to love facts: here then are facts.

Phrenology has done this: and has already, by having so done, effected much good. Because, it is evident, that as long as doubt existed upon the point, whether powers could be begotten or merely developed by education, it would be impossible to proceed in the application of the means, comprised under the name "education," *satisfactorily* and *scientifically*. All the practice of aducation, without such a decision, must necessarily have been *empirical:* and though the *empirical practice* in education might, in spite of its empirical character, be occasionally successful, just in the same manner as John St. Long, though guilty of manslaughter, and Morrison, in his agent, found guilty of the same, may have done good in some cases, the one by his *friction*, the other by his *pills;*

yet, how much greater would have been the success of education, had it been founded upon a knowledge of the constitution of the human mind, and of the laws regulating that constitution; just in the same manner as useful medicines would be used with tenfold greater benefit, when prescribed upon scientific principles—that is, upon principles, founded upon an intimate acquaintance with the constitution of the human body, and of the relationships established between that body in a state of disease and remedial agents.

If any one needs any illustration to convince him of the importance of *principles* to give steadiness and force to practice, we need only to refer him to the well-known saying of Archimedes, that "if he had a place whereon to rest his lever, he would move the world." In regard to education, the existence of certain faculties is the place, the principle; education is the lever; human intelligence the power; and ignorance the world it will remove.

The importance of a principle is strikingly illustrated in the discovery of Phrenology. It was the principle, that if we wish to ascertain the functions or duty of any particular organ or part of the body, we must study the function in connexion with the organ, that led to the discovery of most of the phrenological truths. Other men had dissected, torn, macerated, studied the brain, before Gall and Spurzheim, but, neglecting this principle, they never arrived at a knowledge of its functions.

Phrenology, thus affording a physical demonstration of the existence of certain faculties, gives us a basis on which we can rest with confidence; it takes away all the uncertainty connected with the vague expression of "principles of human nature." Indeed, to establish the great uncertainty connected with this phrase as used, ask any one who uses it what he means, and it will be found that it is a phrase indicative of something almost chaotic; hackneyed by his father, and taken up by the son.

Knowing the existence of faculties, we enter upon the most important duty in existence—education, with a knowledge of the materials upon which we have to work. We are not beating the air; and it is not a matter of chance, as it was under the old system, whether we hit or miss the mark.

The want of the knowledge of the principles of human nature, or of the faculties of the human mind, becomes a source of enthusiasm, productive of the most distressing effects. It prevents, by the expectation of not-to-be-expected results, that permanence of practice which is essential to success. One plan, and then another is tried, until the intellectual and moral formation of the child is lost.

In order still further to establish the importance of Phrenology in education, as giving us these fixed data, these principles, it is necessary to refer to one or two more illustrations of the evils arising from the want of principles.

In fact how often do we find this very phrase—"want of principle"—used. What does it indicate? The uncertainty connected with a man's actions, who wants a principle. If viewed in reference to his *moral* character, it implies that he is not to be trusted.

If employed in reference to his *intellectual* character, it means that he is a charlatan.

The second proposition that is to be investigated is, THAT THESE FACULTIES ARE ARRANGED IN A CERTAIN ORDER.

Phrenology teaches, that man has certain faculties: that these faculties exist in different degrees of activity; and also, that these are divisable into three classes, the ANIMAL, the MORAL AND RELIGIOUS, and the INTELLECTUAL.

Phrenology teaches that the intellectual faculties, situated at the fore part of the head, are arranged, as it were, in *three tiers:* the first, that immediately on and along the eyebrows from *temple to temple*, consisting of the *organs* of the *perceptive* powers; the second tier, consisting of the organs of the *relative* powers—those that perceive the relationships in which bodies are placed to other bodies, in regard to time and space: and the third, the uppermost tier, consisting of the organs of the *reflective faculties;* these reasoning upon the *facts* presented by the faculties, occupying, by their organs, the two lower tiers.

Phrenology teaches also, *that the crown of the head and the upper ridge of the sides* of the head, are occupied by the organs of the moral and religious faculties: Veneration being the keystone of the arch, having benevolence immediately before it, hope on its side, and firmness and conscientiousness behind.

Phrenology teaches further, that the organs of the animal feelings are situated at the *back part* of the head, and at the *lower part of the sides* of the head.

Such is the order of the faculties; and such being the order, is it not quite evident, that the animal feelings are properly manifested, only when they are exhibited under the direction of the moral and religious feelings, these in their turn being directed by the *intellectual powers?* The animal feelings are servants, to walk, not before, but *behind.* They are not moreover to be destroyed, as some people would persuade: they are to be active; but active in their place.

Such then is the order of the faculties: an order, which it will be necessary perpetually to bear in mind.

This order is never disturbed or deviated from, in reference to the *position of the organs.* It is constant; and there can be but little doubt, that, when man came originally from the hands of his Creator, these faculties were thus ordered, and were properly *proportioned.*

This proper proportion is now very much deviated from, both in organization and in manifestation. The animal feelings have gained both organically and manifestatively the mastery. The moral feelings have been prostrated. The intellectual powers have become the servants of the animal feelings, to make them serve in administering to the gratifications of the sensualities, in which, in their uncontrolled state, they luxuriate. The history of the world is one vast mass of manifestations of the dominant animal feelings.

As happiness can never be obtained till the balance is restored,

the question occurs: How is this to be effected? The answer is by *education*. What! leave out Christianity? Oh no: not leave out Christianity: no: we consider Christianity as *that most important part of education*, which relates to the preparation of the human being for heaven—heaven here, and heaven hereafter. It will therefore be now necessary that we should turn the attention to the third proposition: THAT EDUCATION CONSISTS IN THE DRAWING FORTH OF THE FACULTIES. This will unfold to us what this important agent, education, is.

The word "education" is a Latin word, derived from *e*, out of, and *duco*, to lead. So that education means simply *the leading out of*. If applied to the leading out, or the giving proper strength, form, &c. to the limbs, and to the different parts of the body, it is called *physical education*. But this is not that which we wish to investigate at present. When applied to the leading forth of the intellectual faculties,—the moral, religious, and animal feelings, it is more strictly named education. The very word "education," ought to teach every one that education cannot create; it can only draw out what pre-exists. Education cannot create faculties. Wishing to have an arm would not create an arm to an armless man. We have to seek only to *develop*. The word education, thus understood, will lead to the inquiry, What are the faculties that we can draw out? Phrenology gives the answer.

Education being the *leading out* of the faculties, it may, if not properly directed, be the leading forth of those faculties, that have *self* as *their beginning* and their *end:* thus perpetuating vice, misery, and their concomitants: it may be the leading out of the intellectual faculties in an order not in accordance with the arrangement of the faculties, thus producing error: it may be the leading forth of some of the moral feelings in ways not in accordance with the dictates of the others, producing superstitions, and sentimental misery. Thus we are led to the 4th proposition:—THAT EDUCATION TO BE GOOD, PROPER FOOD, AND THAT FOOD PRESENTED IN THE PROPER WAY, AND AT PROPER SEASONS, MUST BE PREPARED FOR THE FACULTIES.

To be continued.

IRRESPONSIBLE POWER.—THE ORGANIC DISEASE.

AT pages 17, 18, 19, it was shown that irresponsible power is contrary to the will of the Creator, in connection with the law, THAT MAN IS SO CONSTITUTED, THAT UNLESS HE IS RESPONSIBLE FOR THE EXERCISE OF POWER, HE MUST, OF NECESSITY, ABUSE THAT POWER. In those pages the illustrations and the demonstrations of the truth of this law are to be found. Our talented Correspondent has followed up the subject in the following Essay.

THE ORGANIC DISEASE.

The cunning amongst the aristocrats have thrown out a word, and by affected alarm at its import, have raised a misty fear amongst

the sleek heads and paunch bellies: The men, who talk, after dinner, of the glorious constitution as established in 1688; without understanding it, even, before dinner.

The glory of the constitution, then established, consisted in confirming the right of the people to cashier kings, and to limit their powers; to put them under compact; and in practically teaching the notion that the *right divine to govern wrong* must yield to the *right human to punish* them for so governing.

Was it not an organic change to banish the Stuarts? We venture to opine that they thought so, and that they were not mistaken. It would be only following the example of our "nobles," who transported James, and visited the sins of the father upon the children, (for aristocrats do not act their bitterness by halves), if the people were now to explain an organic change to mean the transportation of all the present peerage, and the confiscation of their estates, in the same way that the peers served the poor bigot whom they sent upon his travels. Let them remember their cruel laws against treason, and the wholesale cruelty with which those laws were executed against those who sought to restore the exiled family in 1715 and 1745. Let them remember that the people learn cruelty from the governments and the laws under which they are bred; and, that, sometimes historical parallels seize the minds of a people, and they inflict political justice upon those who have been the great workers of cruelty. The mass of the nobility—we would rather say the mass of the *persons called lords*—are men who have none of the old associations, which historical recollections sanctify in some degree to the minds of the people, to sustain them in reverence. The mass of them are creations of the present family, they are not ancients, they are Brunswickers, they have taken their aliases since the great revolutionary lesson in 1688, they are tinsel of yesterday's lacquering; and, therefore, if they cannot secure their position by their utility they will not be preserved for their antiquity.

Men do not respect Lords of yesterday; they respect those who represent the ancient names, because the literature of the nation has associated those names with things that were, or were deemed, glorious; and those names have floated down the stream of time with great associations; but, even as to them, men are fast separating the accidents from the substance, and discovering that many of the actors were rather tools than heroes.

The *increase* of their numbers has injured their class; it has deteriorated them in men's minds: they have compelled the kings to create too many of them. The kingly office has, since the revolution, been made the instrument of increasing the power of the nobles. They have, by means of *their* House of Commons, put the maintenance of the crown upon the people, and diverted the crown lands into their own hands, and to the purposes of jobbing amongst themselves; and have thus subjected the kingly office to the reproach of being a burthen, whilst they have taken the power, the patronage, civil, clerical, naval, military, and political, into their own hands and families. When, in the reign of George the Third,

they were destroying millions of human beings, and extending, by anticipation, the labour and the wealth of unborn generations, to establish tyranny in America and preserve it in France, they turned the people from the real danger, by passing a resolution that the influence of the crown had increased, was increasing, and ought to be diminished. They thus declared a truth more applicable to their own order, but subtlely and traitorously turned that truth into a lie by registering it against the crown.

THE PEERS HAVE BEEN THE GREATEST ENEMIES ROYALTY EVER HAD.* Unable to restrain the physical growth of princes, they have kept them in intellectual babyhood; for be it remembered they have bred the bishops and the dignified clergy, who have had the mind-twisting process, called princely education, committed to them.

The Peers have been wily "cousins" to princes. The coronet and the mitre has sapped the crown; they have done it, principally, through corrupt and irresponsible legislation; and loyal men must now unite and rescue the king and the people from the crushing incubus of hereditary and clerical legislation.

When Burke called this class "the corinthian pillars of polished society," he did for the order that which a crack-brained critic would do for an actor, who should proclaim his spangles to be stars, and polished stones to be diamonds: he would make men look and laugh. Burke did this for those who bought, bent, and pensioned him. The illusion vanished, and contempt has been slowly, and is now rapidly, manifesting itself, not for the men, but for the order.

A man, who is now created a peer, is lost to society. Instead of being thereby made to stand out and to be distinguished by his fellows, it is constantly asked, Who is he? Who was he? It is a disguise, not a distinction.

The peerage is a by-gone illusion. The question is no longer what shall we do? But, What shall we do WITH THE LORDS?

We answer, draw their stings, deprive them of the power of injuring the people.

As Lords they are of man's creation.

Those who created must, in reason, be allowed the power to regulate: the creature must be subject to the creator. Society must be allowed the right to re-arrange or dispose of the tinsel of its own fabrication; if the drippings from the roof of the building injure the foundation, the roof must be repaired; and, if needful, taken off for that purpose. There can be no comparison between the value of the whole building, and the cracked tiles or broken thatch, which lets in the cause of rot and decay.

There is a sort of phobia in the minds of the sticklers for bad tiles and rotten thatch, they affect to treat organic change as a something not to be named; but, if the disease be organic, should not the remedy correspond. If a set of sturdy Norman robbers, the

---

* The original and mathematical Mr. Harris of Walworth, used to describe the regard of the nobles for the kingly dignity, as connected with the fact, that the kingly dignity *was a peg upon which they could hang their own pretensions.*

scourings of their country, managed by the sword to get power into their own hands; if the parcelling out of the land by the chief of the bandits gave them the power of making laws, upon condition that they aided him in all future spoliations; if, in the days of social ignorance and weakness, these things were submitted to because their consequences were not foreseen; or, if foreseen, could not be remedied, does it thence follow, that, when we have discovered the folly and have the power, we should not point out the remedy and set about the repairs. Verily, the "corinthian pillars of polished society" have rusted into weakness, and the foundation, upon which they now totter, has shifted. Knowledge and moral strength are now found where ignorance and weakness were; the pillars have sunk, and endanger themselves and the whole building.

In the days of ignorance and violence the barons were great in the only art that was then cultivated, *the art of human destruction;* but, now, commerce and peace have kissed each other, and freedom and the knowledge of the things that make for peace and human happiness, have been born into the family of man. Arkwright and Watt have beaten Wellington and Buonaparte; the glory of the "Destructionists" has departed; that of the "Obstructives" is departing; and that of the true conservatives, *the producers of wealth*, has increased and is increasing. Men now worship and glory in the results of peace and usefulness, and repent them of the insanity which led them to worship the Moloch of destruction, War, and the false glory which ignorance associated with its victories.

The organization, for which this rabid affection is avowed, had its origin when the law of brute force was the only law of which men had knowledge. The art of printing was not invented, and the Scriptures were not known to the mass; but no sooner did the Scriptures reach the hands of the laity, than men began to understand the nature of religious, and of consequence, of civil liberty, and the justice, not of equal possessions, but of equal rights. They also learnt from Jesus that the only distinctions worthy of reverence, were superior virtue and usefulness. Since then the reverence, which men were previously led to pay to military glory, has been rapidly on the decline, and it will henceforth be no more possible in political matters to make men respect and submit to an organic than to a functional disease; this indeed, might be palliated and borne with; that must be eradicated.

The organic disease has affected the whole machine, and one half of the cure is affected when the cause of a disorder is certainly known.

The House of Lords, their dependants and family connexions, have profited, and do profit, by every corruption in the state, in the old parliamentary boroughs, in the Irish church, in the English church, in the army, in the navy, the colonies, in the government offices, and in the corporations generally. They are a House of Obstructives, the supporters of the corn laws, and the opponents of free trade. They misgoverned America till they drove her to

revolt, and then waged a long war, and wasted the blood and treasure of this country, to resist the independance of that.

The pious ancestors of that now great people, having fled there from the persecutions of priestcraft, and kingcraft, and sustained the perils of the wilderness from their love of religious liberty, the Lords, as soon as the industry of that people had realized them property, sought to rob them of it, by establishing taxation without representation. The Lords maintained that taxation without representation was not tyranny, and the Americans gave them a lesson of political justice, by casting them out altogether from the new world.

The Lords joined in the crusade against the liberties of France as of America; they hired the tomahawk and the scalping knife to establish tyranny in the new world, and they subsidized European slaughterers to perpetuate it in the old.

They supported Pitt, Sidmouth, and Castlereagh: the six acts, and the repeated suspensions of the habeas corpus act.

They rejected again and again the emancipation of the catholics, and now are the bigoted supporters of an alien church in Ireland, and of the employment of soldiers to force by the bayonet and bullets, the tenth potatoe from the starving catholic peasants. Mustard seed is said to assist digestion by trituration. Bullets are the peristaltic persuaders of the church established by the Lords.

The Lords opposed the reform of the House of Commons for more than half a century, and they went to war to burke that question, and secure us bishops, as their predecessors went to war with America to enforce a tyrannical assumption.

When the reform of the House of Commons was brought forward by the government, and passed by repeated majorities of that House, the Lords drove the country to the verge of revolution before they could be induced to pass it.

They threw out the bill for the application of the *surplus* revenues of the Irish church to EDUCATIONAL PURPOSES.

They mutilated the English corporate reform bill, and caused the total rejection of the Irish.

The House of Lords originated in a barbarous age, society has advanced, and they have stood still and looked back. A worse infliction has befallen them than fell upon Lot's wife, they have been turned not into salt but into logs, with this additional punishment, that so much of vitality has been left as gives them the disposition, without the power, to crawl backwards.

Lords were made when idols were worshipped, when mind was in its babyhood. They received their being, as Lords, from ignorance and prejudice; and they reverence their ancestors. They cherish and preserve the law of primogeniture, because it perpetuates their descent from the ancient stocks and stones, by whom brains were scattered, and plunder was secured; true, it is, that primogeniture is contrary to justice, which is the law of God; but then justice was not known in the days of William the Conqueror, and this unnatural law was made. They glory in preserving, as far as possible, their swaddling clothes.

It is true that justice and the law of God require that the children shall be equally cared for by the being to whose care and charge they are given; but then those rules are for common earthenware, and not for mandarines; hence, they have enacted, that, amongst common men, if the parent dies without making his will the children shall share equally; but as to the land, the gift of God to his creatures, that being shared amongst themselves, the younger children are left to the law of the rude and barbarous ages, and the eldest is allowed to take the whole—a fitting rule to make the few, tyrants, and the many, slaves.

What shall we do with them then? TAKE AWAY THEIR IRRESPONSIBLE POWER, which is the source of tyranny, and they will begin to think, and, in time, become useful citizens.

ESSAY XI.—THE HUMAN BODY. *The Spine. The Spinal Cord.*

AT the termination of the last Essay, p. 28, the first vertebra of the neck, the atlas, was in part described. In this Essay, some additional remarks will be made upon this valuable and important part of the human body.

The superior oblique processes of this, the first vertebra, or atlas, are peculiar, being *oblong* and *hollow*, and rising more at their *external* than at their *internal* brim. The articulating surfaces of the skull, called *condyles*, are received upon these oblique processes, and are shaped exactly to fit to them: their margins meeting in every point the surface of the processes; and by the external brim of the oblique processes being higher than the internal, *lateral* dislocation of the head is most effectually prevented.

Another peculiarity, in connexion with this vertebra, by which safety is much augmented, consists in the fact, that the *inferior oblique* processes are large; are extended from within outwards and downwards; are circular at their smooth extremity, where they are slightly hollowed; so that this vertebra *receives* the bones with which it is articulated both *above* and *below*.

The *transverse* processes of this vertebra also are *longer* and *larger* than any others of the vertebra of the neck, thus giving to the muscles, appointed to move this vertebra upon the second, a considerable lever to act upon.

Between, therefore, the articulating surfaces of the atlas and of the skull, the motions of the head *forwards* and *backwards* take place.

The *circular* motion is now to be explained.

This is effected by contrivances, made in the second vertebra, called the *dentata*, or *toothed* vertebræ.

The body of this vertebra is pyramidal: on its upper part it has a square process, with a small point standing out from it. It is said to resemble a tooth, and is hence called *odontoid*, (ὀδυς, odous, a tooth, and ειδος, eidos, resemblance.) The anterior surface of

this process is cylindrical, smooth, and covered with a cartilage, so as to enable it to play easily in the hollow, already described in the anterior arch of the first vertebra.

By this peculiar process being fastened in the way described, and by the mode of connexion between the upper surface of this second vertebra and the lower surface of the first, the head is enabled to move in the rotatory manner; and as long as the ligaments, which bind the process to the first vertebra, are sound, so long is the spinal cord free from injury, notwithstanding the varied motions of the head.

In the vertebræ, there are holes for the passage of the *nerves* from the *spinal cord.*

In reference to the vertebræ *of the back*, called the *dorsal*, the *ribs* are articulated with them at two points, and consequently any modification of the spinal column must affect the position of the ribs.

The spinal cord is therefore contained within a canal, made up of the unions of the apertures of the individual vertebræ; this canal, thus constituted, affording a perfect protection, and, at the same time, allowing that rapidity and ease of motion, which it would not have been possible to have communicated to one undivided tube.

Reference has been made to the *false* vertebræ, which consist of the bones called the os *sacrum* and the os *coccyx*. They do not add to the motion of the spine.

PRACTICAL REMARKS AND OBSERVATIONS.

1. On account of the peculiar nature of the intervertebral substance, the fact that persons are *shorter at night than in the morning*, can be explained. The intervertebral substance, during the day, becomes compressed. Hence, also, arises the explanation of the well-known fact, that, after long illnesses, persons become taller. The horizontal position takes off the pressure upon the spinal column, and hence the elongation. The *diminution* of this intervertebral substance, by age, will enable the reader to explain the fact, why old people generally bow forwards; and, at last, become incapable to raise their spines erect.

2. *The evil of lifting up children by the head* will be readily perceived from the preceding description. Since it appears, that, if the odontoid process of the second vertebra is dislodged from its position, which it may be by such a practice, the spinal cord must necessarily be pressed upon, and death must ensue. In regard to this, some interesting facts will be recorded in a succeeding number, by the kindness of Dr. Harrison.

3. *The effects of spinal deformities upon the ribs, the lungs, the heart, the bowels, and the general health*, must be readily apparent, when it is remembered that these deformities must affect the nerves, which proceed from the spinal cord through apertures in the spinal column. The nerves must be more or less impeded in their passage, and the organs, supplied by them with nervous power, must more or less be affected, and, consequently not perform their functions properly: and, in reference to the ribs, which are

articulated or jointed with the vertebræ of the back, it is evident that their displacement must follow the displacement of the vertebræ, and thus injury must result. How necessary, then, it is that *parents should watch diligently any deviation in the proper form of the spine;* and should avoid putting children too closely to studies which have a tendency to disturb the proper position of the vertebræ.

The wisdom and the benevolence of the Creator are strikingly exhibited in the construction of this spinal column. In fact, nothing need be added on this point, because, no doubt, the conviction has, ere this, reached the mind of every reader.

After perusing the above Essay, the conviction of the necessity to excite into activity the benevolence of individuals to patronize an institution, an advertisement of which appears in the pages of the Magazine, forces itself upon the mind.

Dr. Harrison's Infirmary is an institution in which it is proposed to carry out the plans of that benevolent and intelligent physician, Dr. Harrison, for the cure of spinal complaints: plans, which have been attended with so much success, that interested opposition has been obliged to submit: and the cures performed awaken the highest expectations that few cases of deformity exist which, by those plans, cannot be relieved, if not cured.

Upon this subject some remarks will be found in the following communication from a Correspondent.

ON SPINAL COMPLAINTS.

Esteemed Sir,—I am highly gratified with the liberality and extensive scope of your phrenological views; much yet requires to be done to remove bigotry, inveterate prejudices, and the self-sufficiency of men, whom accidental circumstances alone have placed in commanding stations. I could point out many of these self-sufficient personages, whom it is equally for the benefit of science and of humanity to reduce to their proper level.

The vast importance of a knowledge of Phrenology to religion, morals, and the happiness of society, has been so fully proved by you, that it would only be a waste of time and of words to recommend it, by any eulogies of mine; nevertheless, we every day hear Phrenology meet with the sneers and officious misrepresentations of persons in the higher walks of life. It grieves me to witness the miserable subterfuges to which men of reputation, and good general character, will occasionally stoop, to conceal their own ignorance. These individuals, too indolent to investigate for themselves, do not like to appear unacquainted with what is going on in the world; they therefore treat the question with ridicule, instead of opposing it with argument. For their contemptible, though common-place remarks, I entertain the most ineffable contempt, and always expose the authors of them, and their uncandid remarks, whenever they are advanced in my hearing. The complete exposure of these ex-

hibitors will, I trust, form a leading article in your future numbers; indeed I entertain no fear of ultimate success under your auspices.

You have also introduced another subject, upon which I am anxious for candid and searching discussion, that the truth may prevail, and the happiness of mankind be promoted. I allude to DISORDERS OF THE SPINAL COLUMN, on which so much has lately been written; but, in my opinion, with few exceptions, to no good purpose. As you have called attention to it by your article on spinal anatomy, I take the freedom to inform you, that I am familiar with the *different modes of practice employed in this, and other countries.* Circumstances, not necessary to be explained, have brought me into contact, several times, with that of Dr. Harrison: it is most successful, and having already become popular in several foreign states, will soon be allowed the palm even in this nation. Three foreigners lately visited several of his patients, and being convinced of the excellence of his methods of cure, will encourage the practice in their respective countries, viz. in Hungary, France, and America; the first is a medical professor in the University of Vienna; the second, an ingenious artist, was sent to England by the king of the French: he visited S. Hawkes and Emma Wood, two of Dr. Harrison's patients, formerly distressingly deformed: he looked at their casts and at them with astonishment, and *declared over and over again*, that no similar cure is to be seen in France. This respectable foreigner is modeller to the Royal Museum, and also to the faculty of medicine: he took with him two casts of each patient, one for the Museum, the other for the medical men of his acquaintance: he accompanied them with the published case of S. H., and also Dr. Harrison's letter to Sir B. Brodie, determining that the practice should be made known far and wide, for the benefit of the afflicted.

He candidly acknowledged, that in his country, *when the growth is over no cures were ever achieved;* and added, that, after sixteen, spinal deformities are very seldom removed, however long the attempts for the removal were continued. This is a most important admission, and the more worthy of belief, when we take into account the occupation of its author; in his capacity of chief modeller to the Parisian faculty, he has of course the best opportunities for estimating and deciding upon the merits of the French practice. I may add, in confirmation, that the above statement is fully borne out by my own observations, and the confessions of disappointed sufferers: having conversed with many, who had undergone a full course of gymnastics, and other popular exercises in Paris, Brussels, &c. &c., I can deliver my opinion with confidence. I have, moreover, made myself acquainted with the methods adopted in London, and how far successful. Many have been submitted to my inspection, who had previously undergone the usual treatment, under the superintendence of the most eminent practitioners, and at the first gymnastic establishments in the capital; my investigations and enquiries have led to the following conclusion, that *without recumbency, no improvement in the spinal column, was ever effected, by any mode of practice.* The more recumbency is en-

forced, and complied with, the speedier and more complete will be the benefits conferred: this truth, which begins to be understood, will gradually force its way, in defiance of prejudice and self-interest, which have hitherto impeded its march, and delayed its triumph.

Muscular exercises are, of course, more attractive than complete rest; because, when gone through, individuals are at liberty to follow their pleasures; while those, who adopt the latter, are confined to a particular spot. Nor is this the only objection brought forward against the treatment. It is a prevailing opinion, that without open air, and regular exercise in it, the health will inevitably suffer. This is undoubtedly true, where persons lie soaking, day after day, upon soft feather beds, enveloped in thick blankets, and shut up in close apartments excluded from the external air. No wonder that those, so confined, should exchange their rosy complexions for pale cheeks; or that their constitutional vigor should be speedily destroyed.

During the treatment of spinal complaints, patients are, it is true, strictly confined to the horizontal posture; but under such different circumstances, that the two modes ought not to be compared together, much less confounded with one another. In the latter, patients repose upon firm elastic cushions of horse hair—their clothing is light, and as they are not indulged with curtains, the air circulates freely around them; moreover, they regularly change their apparel, and bed clothes. In this way provision is made to preserve the health uninjured, however long the cure may be protracted. I can safely declare, from much experience, that the health generally improves under the discipline, and that it is never impaired by it. I have often been surprised to hear assertions made, on the authority of certain living practitioners, that constant rest destroys the health, when I know that these very individuals had themselves attended spinal patients for six, and more years, whose health had remained good through the whole period. Of this fact I am prepared to furnish incontestible examples; I am, therefore, at a loss to understand the true cause of their opposition to such a necessary auxiliary.

I never denied, nor do I now entertain any doubt, that muscular exercises are beneficial, so long as they are regularly continued. My objections to them proceed from deeper considerations; I object, because, as *they do not in the least correct spinal distortions, they produce no permanent good.* From the time of discontinuance, the bodily strength gradually declines, and things return again to their former state; nor does the mischief stop here; deformity, when once established, is never stationary: it increases faster or slower through life, with all the frightful consequences attached to it. Such is my deliberate opinion, and after taking great pains to arrive at the truth, I freely declare my conviction and state it openly.

> "I throw the gauntlet warriors used to wield,
> And call for Englishmen to judge the field."

In conclusion, as the muscularians have been often invited to defend their position, or declare their inability to meet the charge,

I, one of the incredulous, repeat the challenge. *Let them come forward with casts and models of real cases, taken from life, before and after the treatment:* these are the tests, and checks to which I appeal: this is the criterion of success with which alone I shall be satisfied, and which none of them have hitherto ventured to produce, well knowing that it is out of their power to bring such evidence. It is Dr. Harrison's boast, that he pursues a course directly the reverse; so far from evading the trial, and fearing exposure, he, in every severe case, insists upon taking models of the deformity: these are lodged with the patients, to be exhibited, and compared from time to time, with the living figure. This proceeding is void of trickery, as every thing is openly displayed; the truth is manifest to all, who take any interest in the matter. Let others embarked in the same pursuit act with equal candour and fairness, that the public may not only be placed in a condition to perceive their way clearly, but be enabled to judge and decide upon what is best for themselves.

The third visitor is the talented son of the late president of the Philadelphia College of Physicians, and brother to one of the medical professors in the university: he has sent the casts and Dr. Harrison's publications, to his brother; the latter is *expected in a few months to visit London, that he may fully understand the practice*, and introduce it among our transatlantic brethren. I have dwelt longer on these matters, to establish the superiority of Dr. Harrison's plans of cure, preparatory to a series of papers upon spinal pathology and practice, which, if my intentions be approved, I will regularly furnish to your interesting journal.

MEDICUS.

N. B. We shall be glad of any communications from our respected Correspondent: premising that the communications be as popular as possible, with the view of showing the miseries arising from the violation of the Creator's laws, and the benefits arising from obedience.

To the Editor of the Christian Physician.

Sir,—I was pleased on reading *The Spectator* of last Saturday, to find that the excellent title, which, I believe, was first given by one of the Essayists in your Magazine, to the individuals who live by causing ships to be destroyed at sea, namely, The Drowning-at-Sea Society, referred to in the following remarks, among others, on The House Burning System: "The effect of the system of fire insurances, like that of the Drowning-at-Sea Society, has been to perpetuate the evils it was intended to avert: individuals are secured from pecuniary loss, but the burnings and drownings continue." These remarks would seem to indicate that the effect of the Drowning-at-Sea Society is fully understood; and further, that there is a subject on which your Essayist can exercise his piercing intellect to pry into the evils of Fire Insurance.

Your obedient Servant,

Sept. 13, 1836. NINA.

EDUCATION AND THE BRITISH ASSOCIATION.

To the Editor of the Christian Physician.

Sir,—Finding it impracticable to have the portrait finished in time, I cannot furnish the paper on the extraordinary child, which I authorized you to promise your readers in this number; I send you, instead of it, a communication which I hope the transcendant importance of the subject will render acceptable.

> Report to the Anthropological Society of London, by John Isaac Hawkins, one of the Delegates from that Society to the proposed Meeting at Bristol, for the formation of a British Phrenological Society, to migrate and to meet contemporaneously with the British Association, for the advancement of science; September 15, 1836.

During my attendance at the meetings of the British Association, held at Bristol, from the 20th to the 27th of last month, I had frequent communications respecting the formation of a British Phrenological Society, as proposed last year at a meeting of the Dublin Phrenological Society. These communications were held with Dr. Evanson of Dublin, Mr. James Simpson of Edinburgh, Captain Sir John Ross, Professor Wheatstone of London, Stedman Whitwell, Esq. of London, and other eminent Phrenologists then attending the meeting; and the opinion of all was, that the Phrenologists present in Bristol at that time, were not sufficiently numerous to found a society that would command public respect; particularly as there is no Phrenological Society in Bristol, to strengthen the hands of the visitors. It was, therefore, unanimously determined to postpone the formation of the society until the next meeting of the British Association, which is to be held in Liverpool next year, in the month of September, when there will be more probability of commencing with strength and influence, owing to the support to be expected from the two Phrenological Societies of Liverpool and Manchester.

From the feeling thus manifested of the necessity for postponing the formation of the society, I wrote to our worthy secretary, my co-delegate, in time to prevent his undertaking a journey to meet with disappointment.

But I am happy to say, that a public meeting was held on the Monday of the week after the close of the proceedings of the Association; at which meeting a committee for advancing the science of Education was formed, and appointed to meet at Liverpool, on the Saturday preceding the meetings of the British Association; and there to concert measures for the advancement of the science of Education, either as a distinct body, meeting contemporaneously with the British Association, or amalgamated with it as an eighth section; as may then be agreed on by the parties concerned.

The *Athenæum* of the 10th instant, No. 463, page 658, contains a brief account of the meeting.

The newspaper entitled *Felix Farley's Bristol Journal*, of the 3rd instant, gives a longer and more interesting account, as developing the enlarged views of several members of the Committee.

EDUCATION.

"On Monday last a Meeting called by several members of the British Association, took place at the Institution, Park-street, for the purpose of considering the propriety of holding a meeting in Liverpool, at the next meeting of the Association, to promote the advancement of the "Science of Education." Thomas Wyse, Esq. M. P., presided, and on taking the chair said, the object of the meeting was entirely for the purpose of making arrangements for a public meeting on the subject of education, but did not in the slightest degree contemplate the discussion of the merits or results of education, or any of the theories which had been broached on the subject. Several gentlemen of the British Association had been greatly impressed with the importance of metaphysically investigating the subject in the statistical section, but they found by the regulations of the section they were precluded from doing so without infringing on its rules. As the desire of these gentlemen, as members of the British Association, was to submit to its code of rules, and to avoid any circumstance which might produce a feeling of dissension, they at once acquiesced in the arrangement, and however anxious they might be for the improvement of education, they would be sorry to create a supposition of any interference with the meetings of the Association. The statistical section referred only to numbers, and did not admit of the metaphysical part so necessary to education. At the same time the friends of education consider that the mere numbers of children receiving instruction, their ages, &c. though important when a good system was established, were indifferent or even injurious if the system was bad. Their attention, therefore, would be desired to enquire what systems were good or bad; if good, whether they were capable of improvement; and if bad, in what respects, and how their defects might be eradicated. It would appear to all, that the question involved many important facts, and that numerous deductions were to be drawn from them. Another point was, the results which education was calculated to produce, both on individuals and on the masses; and much error existed as to certain facts which were supposed to originate from education, though it had not been established clearly. Therefore these facts ought to be investigated and scrutinized, and before deprecating education, the causes connecting them with it shown beyond all cavil. It must be evident to every person, that the meetings of the British Association offered most excellent opportunities of bringing together from different parts of the country, minds capable of grappling with this important question; and, if they were anxious to obtain an opportunity more desirable than another it was the one referred to. One objection which had been started against educational enquiry was, that the proceedings were always of an *ex parte* nature, and that the educationists were a knot of persons biassed to a particular theory. But if it were the

case, that bias was only to be corrected by coming in contact with other persons, and profiting by their views, and this was an advantage to be derived only from the meetings of the British Association. While anxious, however, to avail themselves of this advantage, they were not less desirous of removing from the minds of the Council of the Association all apprehensions of an interference with their regulations, or of mixing with the Association any tendencies which might be conceived to be injurious to it. He was sure that gentlemen would see the necessity of omitting political and sectarian feeling altogether, and without keeping to figures exclusively, they might avoid all that acerbity of feeling and partizanship, which, he was convinced, had done more than any thing else to retard the progress of education in this country. He need not impress on the meeting the absolute necessity of this, because he was only giving utterance to their own feelings. The next question was, how these views were to be brought into effect. The course was easy; they saw no reason why at the next meeting of the Association they might not meet, and, although not forming a section of the Association, yet the course adopted at the sections might be adopted—papers might be received and read, and discussions take place, and whatever was considered deserving, might be brought before the public through the medium of the press. The conduct of the meeting it was proposed should be intrusted to a committee, and he believed that there would be many distinguished men willing to take the duties on themselves. The next meeting of the British Association would take place at Liverpool, and it would be for the Committee to make the necessary arrangements.

The Rev. Edward Stanley said, that, during the whole week occupied by the meetings of the British Association, he was a mere hewer of wood and drawer of water, but here he was not so. He was no longer insignificant—he stood before them as one who had spent thirty years of his life in endeavouring to ameliorate the condition of the people. As a member of the British Association, and one of its vice-presidents for the ensuing year, he wished it to be clearly understood that he appeared there as the firm friend of education, but totally distinct from the British Association; and those gentlemen, who had called the present meeting, only desired to avail themselves of its assembling to meet and have intercourse on a subject in which they took a deep interest. That there were defects in the present systems of education was beyond doubt; indeed if there were not they would not have met that day. But they saw some defects. He saw, though he was a Church of England man, some defects in the national system of education. He considered it the best system, but he saw many parts which could be improved. He was disappointed in looking at it, for he saw there was something wanted. He believed there was some desideratum, some secret, to light the fire and fan the flame which education ought to produce. In the national schools there was great aptness among the scholars; they would give you the genealogy of every Scriptural character from Adam downwards; they had the thirty-nine articles and all its doctrinal points at the tip of their fingers, but were they in the recesses of their hearts? That was the great point to be looked after. He

wished that what they learned should remain not only in their heads but go to their hearts? Orthodoxy was one thing, religion another. Orthodoxy was very good in its way, but then it ought to rest on religion. Orthodoxy was like the great masses of granite on Dartmoor, but turn to the garden and he should prefer the Vale of Evesham. In the first they had the soil, but they had not the flowers and the fruit, and the beauty, which the last, like Christianity, bestowed. The Rev. speaker then made some observations on the presence of ladies. He said, look at the learned professions and they would find religious men—look at the army and they would find many religious officers; it was true that their swords were not always unsheathed, nor were they always storming the breach,—but look at that service which was of most importance to us—the Navy—look to those whose march is on the mountain wave, whose home is on the deep—it is in the black middle watch, when pacing the quarter deck, and when they are separated from all the world beside, that they had their most religious feelings on them. And it was his conviction that in the majority of cases the sense of religion was derived from maternal instruction. But the seed must be imparted in early life, and he would appeal to those who knew better than himself, whether it was not possible to implant that seed in the hearts of infants a week old. The temper might be regulated, and that was a great thing. It was to female influence that they must look for the onward march of education, and in training the youthful mind, they ought to emulate the kindness and the mildness of the mother. The Rev. speaker then alluded to the proverbial mildness of the society of friends, observing, that, in consequence of the hospitality universally displayed towards the British Association, by the citizens of Bristol, he could not apply the term "friend" to one body exclusively: and he concluded by moving a resolution to the effect, that it was expedient to carefully investigate the subject of education, and that the meeting of the British Association offered a valuable opportunity for that purpose.

The Rev. Dr. Carpenter, in seconding the resolution, did so with the very deliberate conviction of his own mind that the great Association should either expressly include physical science in its title, or admit sections to discuss the important question of mind and morals. Mr. Stanley had stated there was a great fault in the existing systems of education, but bring together those great men who attended the British Association, and it would soon be removed. He (Dr. Carpenter) had remonstrated against the exclusion of the science of mind and morals from the discussions of the Association, and he should continue to do so till he succeeded in his object, or the Association was explicitly termed for "physical science" only.

A gentleman, whose name we could not learn, made some brief observations on the importance of education, and in alluding to the words of Mr. Stanley, with respect to female instruction, stated that in discoursing a few days ago with Mr. Moore, the biographer of Lord Byron, Mr. M. attributed that distinguished nobleman's faults either to defects in his maternal instruction, or to the bad system of education afterwards pursued.

The Rev. Dr. Jerrard moved the second resolution, and im-

pressed on those present that they were entirely distinct from, and independant of, the British Association, and that they merely intended to avail themselves of the assembling of that body, and the excitement of mind thus produced, to meet and discuss the subject of education. He had heard that a similiar society, with another object of course, had been projected adjunct to the British Association, and he had no doubt many would follow. He did not wish to be too closely united with the British Association, which was a great sun of science, in order that they might not, like the comets, be absorbed in its rays; he trusted that like the planets they should circulate in their own orbit without perturbation, and more particularly that most to be dreaded—the perturbation of politics. Dr. J. concluded by proposing a resolution in substance—that as the statistical section of the British Association confined its enquiries mainly to numbers, it was desirable that members taking an interest in the science of education, should meet for the purpose of enquiring into that question, and also to investigate the objects, means, and results of education, at the same time as the British Association.

Mr. Simpson seconded the resolution at some length, declaring that if the proposed meeting produced the results which its promoters expected, it would be of ten times told more importance than the British Association. He also stated that he had mentioned the object of the meeting to the father of the Association—Sir David Brewster—who cordially approved of it.

Dr. Taylor then read the following list of gentlemen who he proposed should form a committee (with power to add to their number) to make the necessary arrangements: Thomas Wyse, Esq. M. P., Rev. E. G. Stanley, Mr. W. R. Greg, Mr. Romilly, Mr. James Heywood, Dr. Macartney, Mr. J. M. Morgan, Mr. John Isaac Hawkins, Dr. Lant Carpenter, Mr. James Simpson, Dr. Jerrard, Dr. Pritchard, Mr. William Rathbone, Mr. Hovenden, Mr. C. B. Fripp, Dr. W. C. Taylor, and Mr. Thomas Coates. The motion was seconded by Mr. C. B. Fripp, and carried unanimously.

It was then resolved on the motion of Mr. Coates, seconded by Mr. J. I. Hawkins, that the meeting should take place on the day preceding the meeting of the British Association.—Thanks were then voted to the chairman, which he appropriately acknowledged, and the meeting separated."

I view the formation of this committee as one of the most important events of this very eventful age; and think I can see the finger of Providence pointing to it, in a signal manner, as the germ of an institution that will confer a hundred fold more benefits on society in one generation, than all the legislatures on earth could effect in a century. To this focus will annually converge, the most enlarged and enlightened views of all sects and parties, stripped of the fetters with which sectarianism would clog them: and from this focus may then be diffused throughout the earth, in meridian splendour, the concentrated essence of those enlarged and enlightened views; tending to inoculate with sound knowledge and good feeling, by degrees, all systems of education, from the most civilized down to the most barbarous.

It is remarkable that this committee possesses a great variety of character as to religious profession and as to local residence. I noticed, among its seventeen members, a Catholic from Ireland, a Church of England man from Lancashire, a Presbyterian from Edinburgh, a Unitarian of Bristol, a Swedenborgian from London, and a Philanthropist, of no peculiar creed, from London. The *Athenæum* says, "That each of the classes, of Catholics, Protestants, and Dissenters, had more than one representative present!" But should the remaining eleven members prove to be but repetitions of the above, there is variety enough to ensure the absence of that marplot of all improvement, the mischievous fiend, sectarianism, and to obtain the presence of the beneficent spirit of liberality, without a goodly portion of which, such a body could not advance one step.

I deem it the highest honour that ever was conferred upon me, that I was invited to take part in those proceedings, and that my name is enrolled as a member of the committee; and I shall feel it a paramount duty to pour my whole soul into the work, and labour with all my might in the discharge of the extensive duties which will, doubtless, unfold themselves in the progress of the institution.

As I know, by much observation and experience, that societies are apt to continue their progression in the direction in which they are first started, I feel deeply the great importance of the first step of the committee, and shall think a year well employed in collecting information respecting the views and feelings of the zealous friends of education of all sects and parties; and I call upon you all, as men who have declared, by your adhesion to the Anthropological Society, your desire to labour for the advancement of man, I call upon you to aid and abet me in the glorious work; that I may go to Liverpool, if it should please the Divine Providence to send me there next year, charged with measures concocted, digested, and prepared to become a part of the circulating medium which is to bring educational health to the human race.

In the course of the year let every member of this Society bring his flowers of education, be they few or many, and I will endeavour, through divine assistance, to suck the honey out of these nectaria, and carry it to Liverpool, and there deposit it in the grand honeycomb of the educational committee, where it may commix with the accumulations of distant gardens and fields, the whole of which may be distributed in rich abundance throughout the habitations of man; thus we shall contribute our humble mite towards the healing of the nations.

To drop metaphor, I earnestly call upon every member of this Society, to turn his most serious attention to the subject of Education in all its bearings, and to state his views, from time to time, in papers read at the meetings; and I would advise that we wait not until we can produce an elaborate essay, but that we bring forward our notions, however crude, in short sketches, that they may be sifted, and corrected, and packed up in orderly arrangement, ready to be dispatched to the grand mart of educational wares next year at Liverpool: papers of five minutes each will be likely to afford more pith, than if they were ten times the length.

In no way can we contribute more largely towards the welfare of

our species; in no way can we better prove that we are what we pretend to be, a Society united for the purpose of advancing the condition of human nature; and it is the privilege as well as the official duty of the Anthropological Society, to take the lead in this truly glorious proceeding.

If the Phrenological Societies generally will pursue a similar course, and pour their tributary streams into the ocean of educational science, it will doubtless contribute towards the accomplishment of the divine promise, that the earth shall be filled with the knowledge of the Lord as the waters cover the sea.

Viewing Phrenology, as I do, as destined to be of immense benefit to mankind, as one of the master-keys to unlock the secret cabinets of educational knowledge, and valuing it chiefly on account of its important bearing on education, I am inclined to the opinion, that the necessity of the British Phrenological Society, for some years at least, is in a great degree superseded by the appointment of the Educational Committee, which will work to the same end in a more popular form, and therefore is more likely to reach popular feeling and effect popular reformation.

Phrenology, which throws so much light upon the nature of man and on his education, can act more beneficially upon society by infusing its principles into the measures of educational science, than by exposing itself to popular notice, and thereby tending to inflame popular prejudice, and goad it into obstinate resistance.

Popular prejudice seems in some degree prepared to yield to such measures, as a body, constituted like the Educational Committee, may be supposed to adopt. Let, then, the Phrenologists be content to act the part of soul to educational science, and let the body only be visible to the public.

Should the British Phrenological Society be established at Liverpool, under the auspices of a numerous host of visitors, supported by the Phrenological Societies of Liverpool and Manchester, it would, no doubt, have a brilliant commencement; but should the meetings of the British Association, in after years, take place in a town where there is no Phrenological Society near, it may be apprehended that a great falling off of interest and consequence would be experienced, and perhaps annihilation might be the result; for unless there be a Phrenological Society in or near the town where the British Association meets, the confluence of visitors might be too small to produce a meeting which would appear respectable in the eyes of the public.

Phrenology is a young science, and should not, as youth is apt to be, be too obtrusive of its views and feelings in company unprepared to appreciate them.

Phrenology indicates that all the faculties of the mind and body of every person, should be properly educated, and therefore that there should be no such thing as a mere student, or a mere labourer; but that study and labour should be so intermixed daily, by every person, rich or poor, that the health of the body should not be injured by the labour of the mind, nor the growth of the mind be

hindered by the continual labour of the body; and no system of teaching can be worthy of support, that does not embrace the two.

No school is worthy the name, that does not provide for, and duly exercise, the religious, the moral, the intellectual, and the animal faculties of man; it therefore follows, that every school should be a manufactory, and every manufactory a school.

It is a lamentable error, which prevails to a most destructive degree in this country, more than in any country which I have seen, and I have visited many; it is a lamentable error, to suppose that labour is dishonourable. Almost all persons are straining every nerve to its utmost power to escape from a life of labour, and obtain what is insanely imagined to be independence; and hence contempt is poured upon the labourer in every degrading form. Education will do but little until it eradicates this diabolical feeling; and all the real friends to education, should labour incessantly to weaken and destroy this pest of human society.

If the Educational Committee start in this direction, they will have a tower of strength to support them; they will draw to their aid a mass of public intelligence, which now awaits the power and means of expression; and they will become the beneficial diffusers of that intelligence to the whole of mankind. If they take an inferior stand, and contemplate a state of religious, moral, and intellectual teaching only, to the neglect of the animal, they will find the age soon outgrow their measures, and a new Society, a migratory Anthropological Society, must be founded, to fill up the void which the short-sightedness and narrow views of the Educational Committee will have created.

MISPRINTING OF JOHN BELLAMY'S PETITION.

Sir,—I was much delighted with the valuable, the interesting, petition of John Bellamy, in the last number. The new readings are certainly of the highest importance: they will rob infidelity of some of its arms, and will place the character of the God of revelation in a more acceptable light. There appears, however, to be a serious misprint in one of the passages. It is, "shall evil be in the city, and Jehovah hath not *required* it." Now it strikes me that it should be "*requited*" instead of "*required.*" In fact, this mistake is so great, this substitution of an "*r*" for a "*t*" makes so great a difference, as to call to mind an observation of Cowper, who, in one of his letters to Mr. Unwin, says, "I shall now have, what I should not otherwise have had, an opportunity to correct the press myself, no small advantage upon any occasion, but especially important where poetry is concerned. A single erratum *may knock out the brains of a whole passage*, and that, perhaps, which of all others the unfortunate poet is the most proud of!"

I think that Mr. Bellamy will say "Amen" to this clever remark of Cowper. DEKA.

[Our Correspondent is correct. It should be written "requited" instead of "required."—Ed.]

NEWSPAPER DUTY. THE TIMES AND THE MORNING ADVERTISER.

The reduction of the duty on Newspapers has put a great increase of moral force into action, and will bring much more. Newspapers will be increased: and, as they will now be read by many who did not before get them, they will be written with additional honesty, for they must be written for the many.

Newspaper proprietors are tradesmen, who embark their capital to make profit by it, and the editors hire themselves to write articles *that will sell;* the greater the number of readers, the more popular will the staple of the market become; and though, hitherto, the articles have been written for castes, they will now be addressed to a wider and much less defined circle.

The stamp of one penny destroyed the periodical press in the reign of Queen Anne; but the quadruple tax has not been able to arrest, though it has greatly retarded, the political knowledge of the many, in the reign of the Georges. A section only of the people were readers in the time of Queen Anne: now, the mass are readers; and, as the aristocracy would have it *not*, a great proportion of the *readers* are *thinkers* also.

The daily morning press has been latterly confined principally to four papers, the Chronicle, the Times, the Herald, and the Morning Advertiser: the Post circulating merely amongst the exclusives —the perfumed consumers—the slight quantity of useful information it contains is suited to the slightly useful class for whom it is provided.

The Times and the Morning Advertiser furnish matter for important and useful reflection. The Times was at the head in circulation, and it was proportionably powerful in following and strengthening the public tendency, for it never led, it ably gathered up, and stated and enforced the public opinion; but its recent act of political profligacy did violence to the feelings of most of its readers: the suddenness, with which it flew round, shocked more from its rapidity than from the act itself. It could, before that act, increase the quiet stream of public opinion into a full and powerful current, bearing most subjects onward which it desired to urge forward.

Before that unhappy change, with the strong tendency there always is to yield to appeals to the sympathy of the mass in favour of the poor, the powerful advocacy of those claims in its columns would not have failed to produce an effect far, very far greater, than they are now able to produce against the "poor starvation" bill.

We speak merely of the comparative effects. Those who read it because they admire, or because they have been used to, its style, read it without confidence; and to its new class of readers amongst the conservatives, it cannot have weight of character or the influence of habit. It had become essentially a commercial paper,

the active and influential amongst the commercial and middle classes were universally its readers, and mostly its followers; but the suddenness and the violence of its change disgusted most and severed many. The leading proprietors probably were misled by their apparent success against the meteor Lord Brougham, who had flared himself out, into the supposition that they could turn against their professions with as little injury to themselves as they had turned against the man: they had forgotten, that, in an enlightened society, men feel their own self-respect attacked when their opinions are assailed, and particularly when assailed by deserters; but they have not the same regard for the persons of politicians, whose sins have a more abiding register in men's recollections than their services; particularly when, as in his case, those services were, from time to time, amply rewarded by station and influence. The man, who as Henry Brougham, the member for Yorkshire, was as great in mind as he then was by the common suffrage in position, they had seen, dazzled by a title, descend into a lord, and place his official patronage, as Lord Chancellor, in the hands of the bishops; then abuse and ridicule the Lords, and then praise them almost to toadyism; it needed not much after this to satisfy men, that, splendid as were his powers, his judgment was small compared with his talents; his subsequent incontinence of words proclaimed to them, that he had lost his principles; and his never-to-be-forgotten "do-little, do-less" speech, cut his own foundation from under him; he played out his own fame; the Times had only to blow the bellows. The Times tradesmen did the same thing for themselves, when they supposed they could turn round upon *principles* with the same success that they turned round upon the man; and the paper is now a mouthing herald of the increased judgment of the people, who are not to be blown about by talented shallows or "thundering" hypocrites.

The Morning Advertiser was a paper, which, on account of the inferior class of persons who used to read it, was termed the "Tap Tub." It was published at six in the morning, without reference to the parliamentary debates, the great matters upon which the national prosperity was founded finding but a slight attention in its columns, and its literary execution, type, and matter, being inferior to many provincial papers; but now, its size, its leaders, and its literary articles, and the manner in which they are treated, and the paper itself is produced and supported, are all evidences of the great change which has come over the spirit of the age.

Those who were the slaves of a corrupt and jobbing magistracy, have now the command and protection of one of the leading journals of the day, and themselves rank with those upon whom the progress of intellect and the welfare of this great country now depends.

The "Leading Journal of Europe," now that it has become a hireling conservative, will find that the aspect of the times has changed, and the abuse, which, when the paper earned the title of the "Slop Pail," nevertheless sold it, will no longer sustain it.

DROWNING-AT-SEA SOCIETY. OBEDIENCE AND HAPPINESS—DISOBEDIENCE AND MISERY.

In a previous Number it was stated that the effect of the agitation of this question, in reference to the existence and the operations of the above Society, had been, that a Parliamentary Committee was appointed to inquire into the causes of so many shipwrecks. This Committee has made its Report, which will be brought before the attention of the reader in the next Number. We intended to have examined it in this Number; but there is so much to discover, and so many flagrant fallings off in that Report, when viewed in relation to the evidence, that it will be necessary, it seems to us, to pry deeper into the matter than was, at first, deemed necessary. It is expected that there will not be any reason to regret the delay: we are in a train by which, it is hoped, we shall be able to discover the cause why the principal evil, in reference to which the parliamentary inquiry had its origin, has been passed over, and the lesser evils alone brought into sight, and recommendations of improvement regarding them, if not only, at least principally urged. In the examination of that Report, we shall refer to some new Insurance Societies, established for the purpose of insuring ships whatever may be their construction. We give them a month to repent.

BEAUTY AND UTILITY.

BY E. J. HYTCH.

Beside the ocean stood a withered man,
Where the young morn in rosy hue was breaking;
But, though his heart was old, it was partaking
Of gladness, such as all may feel who scan,
And love, the wisdom of their Maker's plan.
He stood: and, whilst the new-fledged birds were waking
Their simple anthems, his glad soul was slaking
Its thirst for joy—which like a river ran.
Before his eyes beheld this gentle scene,
Dark cares had found within his breast a home;
But the glad earth, with sky-encircling dome,
Had still'd his woes as though they had not been:
Thus all declared—the earth, the sky, and sea—
Where beauty dwells *there* dwells utility!
1836.

Gratitude.—A very poor aged man, busied in planting and grafting an apple tree, was rudely interrupted by this interrogation, "Why do you plant trees, who cannot hope to eat the fruit of them?" He raised himself up, and, leaning upon his spade, replied, "Some one planted trees for me before I was born, and I have eaten the fruit: I now plant for others, that the memorial of my gratitude may exist when I am dead and gone."

TRANSLATION OF THE SCRIPTURES.

Essay II.

In an Essay in a preceding number, an attempt was made to demonstrate, that, as the volume of revelation contains the will of the Creator in reference to the *regulation of man's moral conduct*, it became of the greatest importance to mankind, that they should possess a correct knowledge of the matters contained within that volume. It was also shown that the translation of the Scriptures, as used in this country, is very incorrect, presenting, from such incorrectness, erroneous views of the Creator's character, and, thereby, opposing barriers to the reception of those important and intellectually and morally influencing truths contained therein. To two matters the attention will be directed in the following remarks: first, the causes of such inaccuracies: and second, the impediments which monopoly has occasioned to the distribution of the volume of revelation itself.

In reference to the causes of the inaccuracies in our present translation, the following statement by John Bellamy, the individual, whose interesting petition, published in the previous number, containing the proper readings of certain most difficult passages, will merit the attention of the reader.

No translation has been made from the original Hebrew since the 128th year of Christ. This translation was made by a Greek, named Aquila, and is called the *Septuagint*. The original work, known by that name, which was translated by *seventy* individuals, by the order of Ptolemy Philadelphus, about 350 years before Christ, was deposited in the library of that monarch, and was lost to the world when that library was entirely burnt.

Dr. Wall states, that these spurious Septuagint translations are very imperfect. Hierom says, that the Hebrew names of men, places, and things, having been first mis-spelt in Greek by one, were written more corruptly by another, till, at last, instead of Hebrew names, they were Sarmatical ones. And he acknowledges to Damasus, that the errors in the Greek Scriptures had induced him to attempt a Latin translation from the Hebrew. And we find that the Vatican, the Alexandrian, the Aldin, and Complute editions of the Septuagint, have various readings.

In the fourth century, Jerome made his Latin version from the Greek translation. From his translation came the Latin vulgate: and from the Latin Vulgate all the European translations have been made, thereby perpetuating all the errors of the first translators.

It is quite evident from these facts, that the present translation of the Scriptures, made in the year 1607, must be imperfect. Indeed, it is not a translation, as many persons imagine. Fifty-four of the most learned men of the Universities of Oxford and Cambridge, were appointed to *revise* the Scriptures. They were divided into six companies: and in their inquiries, confined themselves to the Septuagint and the Vulgate.

In order, however, to prove the conclusion arising from these facts, namely, that the present translation of the Scriptures is very imperfect, to be justified, the opinions of some, who will be deemed by most as good judges, may be quoted.

"Were a version of the Bible executed in a manner suitable to the magnitude of the undertaking, such a measure would have a direct tendency to establish the faith of thousands." *Bp. Newcomb.*—"An accurate translation, proved and supported by sacred criticism, would quash and silence most of the objections of pert and profane cavillers." *Blackwall's Sac. Class. Pref.* 1731.—"Nothing would more effectually conduce to this end, than the exhibiting the Holy Scriptures themselves in a more advantageous and just light, by an accurate revisal of our vulgar translation." *Dr. Lowth's Visitation Sermon at Durham*, 1758.—"The version now in use in many places does not exhibit the sense of the text, and mistakes it besides in an infinite number of instances." *Durell's Crit. on Job*, 1772.—"Whoever examines our version in present use, will find that it is ambiguous and incorrect, even in matters of the highest importance." *Professor Symonds's Observations on the Expediency of revising the Present Version*, 1789.—"Great improvements might now be made, because the Hebrew and Greek languages have been much cultivated and far better understood, since the year 1600." *Dr. Kennicott's Remarks, &c.* 1787, p. 6.—"It has mistaken the true sense of the Hebrew in not a few places. Do we not know the advantages commonly taken by the enemies of revelation, of triumphing in objections plausibly raised against the Divine Word, upon the basis of an unsound text or wrong translation?" *Blaney's Prelim. Disc. to Jeremiah*, 1789.

Why all these remarks? The answer is simple. The aim has been to convince that, unless the mind of the Creator is known, we cannot obey his laws: and that, if we have an imperfect translation of the Scriptures, which we use in discovering the will of that Creator, we must make mistakes. And if mistakes, in reference to the laws of the *natural* world are attended with so much injury, mistakes in regard to the moral world must be highly injurious.

The next point, namely, that *monopoly has prevented*, to a very great extent, *the distribution of the volume* of revelation, will be entered upon in the succeeding number.

CORN LAWS. OBEDIENCE AND HAPPINESS—DISOBEDIENCE AND MISERY.

At pages 37, 200, 236, and 241, of the preceding volume of this Magazine, the reader will find the nature and the injurious operation of the oppressive, the heaven-insulting Corn Laws, existing in this country. Circumstances now in progress recall the attention to the subject: they are the following:

It appears, that, from various causes, there is a *scarcity of grain* in America. America too, be it remembered, is the quarter from which *our* West India Islands derive their supply of flour:

which article, it seems hardly credible, though it is a fact, the Corn Laws of this country prevent the *people of this country* from supplying to *their West Indian fellow subjects*. Is not such a system vicious? Look at the injury inflicted upon our fellow men, our countrymen, in the West India islands: they are obliged to purchase flour of the Americans: the Americans are *now* obliged to buy the *grain*, by them converted into *flour*, from us. It is hence evident, that the price of flour must be augmented to the purchasers; because, if a corn-factor in England sells corn to a corn-factor in America, he must sell it at a profit. The corn-factor in America has to add his profit to the selling price of the article, he has to add the *carriage* from Britain to America, and the consumer in the West Indies must pay for all this roundabout course of folly and injustice. Whereas, were the Corn Laws not in existence, the British corn-factor would be able to convert his grain into flour, and send it *direct to the West Indies;* and thus the West India inhabitant would be enabled to buy the flour with only the profit charge of the original seller in Britain, and the charge for carriage, and thus he, and the British corn-factor, the British miller, and the British ship-owner, would be benefitted. The Corn Laws say no. The Corn Laws say, "People of Dantzic, and ye Hamburghers, Canadians, men of Guernsey, of Jersey, and ye men of the Isle of Man, send your flour (for they can do this, ye cant,) to the West Indies, and ye may buy your grain in England to convert into flour; but, Englishmen, ye shall not, because those, who made us, think (and we do not say that *they are not fools* for so thinking,) that such a freedom would diminish their rents."

But what is worse, it is likely that America will not be able to supply the requisite quantity of flour to the West India market. In 1834, 195,000 barrels of flour were exported from the port of New York alone. In 1835, 50,000 barrels less were exported from New York, on account of the failure of the wheat crop in America: this condition of deficiency of crop prevails, at least so far as can be judged from the large purchases of grain made for America, of the British holders of foreign grain; and it is likely that the Americans will not, this year, be able to export to the West Indies the requisite quantity of grain. Then why should not the corn-holders in this country be permitted to send their corn and their *flour direct to the West Indies?* No, says the law, and adds, "West Indians, our dearly beloved obedient subjects, corn is your staple commodity, but you shall not have the corn of British merchants, unless you receive it after it has gone a voyage to America, there made into flour, and then sent to you; and as a consolation, ye fools, for submitting to this, you have to remember that corn may, perhaps, get better by being exposed to a sea voyage, as wine does by a voyage to the East Indies."

How long shall these things be? Is not disobedience to the law of God, which requires that MAN SHOULD NOT MAKE DEAR WHAT GOD MAKES CHEAP, attended with injury?

X.

JAMES C. B. HAWKINS,
Age 7½ Years.

Drawn on Stone from a Bust modelled by John Isaac Hawkins

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

No. 3.] NOVEMBER 1, 1836. [Vol. II.

PHRENOLOGY AND EDUCATION.

Essay II. *Read before the Anthropological Society, by* John Epps, M.D.

At the conclusion of the first Essay, the 4th proposition, That education to be good, proper food, and that food presented in the proper way, and at proper seasons, must be prepared for the faculties.

To this the attention is now to be directed; and, atthe outset, it seems proper to remark, that the faculties of the mind are nourished like the organs of the body. Each has its own appropriate food: still, both require food. The great difficulty in education is the choice of the proper food. In choosing foods for the body there is often considerable difficulty; how much more likely, then, is difficulty to be expected in preparing food for the *mind.*

Previously to entering upon the consideration of the proper foods for the faculties of the mind, it may be advantageous to notice a very erroneous idea entertained by many, that children do not like education; or, as it is commonly expressed, "*children do not like school.*" "School" has, unfortunately, been so associated with "education," that they have at last become synonymous. Children may not like school; and the reason is because they are *not educated* at the school. If children were educated at school, they would like school as well as their play: their school-hour as well as their dinner-hour. But the schoolmasters expect, like the taskmasters of old, the children to make bricks without straw: they expect the children to be educated without giving the materials for education. Some children like school: and it is interesting to observe, that, in this case, the master instructs his scholars in that subject or those subjects which the faculties of the children, liking school, enable them to enjoy—how? by appreciating. To illustrate, let us take two boys, one liking, from natural constitution of mind, arithmetic, and another not. Arithmetic is taught at the school. All the boys go through the same routine: but it is quite evident that the boy, who is not favourably developed, cannot feel any pleasure in going through a lesson that he does not appreciate: the other enjoys the exercise, because his mind is qualified for the investigation. The former hates school: the latter loves it: that is, if arithmetic is the chief.

It is quite erroneous to assert that children are not fond of educa-

tion. The faculties of the human mind are so constituted, as to have gratification in their exercise. This gratification is a constant appeal to induce their activity: and they, in one sense, are like the horse-leech, who, according to Solomon, cries "Give, give:" and they may be compared, when viewed in relation to their comprehensive desire, to another similitude of the same author, namely, the maw of the grave, which is never satisfied. If you doubt, observe the inquisitiveness of a child. Count the various questions asked in a day by a child—and then deny that the child does not desire his faculties to be led out: and what is this but education. All the faculties, indeed, are so many hungry stomachs, constantly seeking after food: and contrary to the constitution of the material stomach, the more they eat the more they want to eat, and the more capable of eating and digesting do they become.

How important, then, must it be to know what is the proper food for the faculties, so that in gratifying the appetite for knowledge we may do good to the child.

A proper education is one which calls into activity all the faculties, just in the same manner as a proper state of society is one that allows opportunities for every individual to exercise all his faculties: and as the *social* system will never be at rest until this extensive condition is brought about, so the educational system will never be perfect till such a general exercise of all the faculties be realized.

Every faculty was given to man as a source of satisfaction; and thus every faculty is an impress of the goodness of the Deity; while the arrangement of the whole is an impress of His wisdom.

There are occasions, however, when the faculties cannot be properly exercised. There are times for all things, says Solomon. A proper education, therefore, is one which so brings out the faculties, that the individuals shall have such a command over their manifestations as to let them be actively and manifestatively operative on occasions justifying their activity.

It is evident that there must be some standard by which the activity of the faculties must be regulated. Each man must have a standard. The obtainment of a correct standard is very important.

In relation to this, it must be remembered, that *man is not an isolated being*. He could not be happy isolated: in other words, his faculties forbid isolation. He exists in reference to *society*, to an *external world*, and to an *internal monitor*. The activity of his faculties, therefore, to be beneficial, must be in accordance with the laws which regulate the *physical* and the *moral* world.

The grand ultimatum of education, then, must be the instruction of the individual in the knowledge of the relationships, in which he is placed by the Creator, to external nature, to society, and to his Maker. Is this knowledge taught? No. It is hardly thought of. It is not wholly neglected, it is true; because the very kindness of a parent prevents the child from perfect ignorance. Thus, the parent snatches away the little hand, that would, in the ignorance of its mover, seize the lighted candle. The parent *thus* teaches the child the law of nature, that fire is placed in such a relation to the body, that it destroys it. But even in teaching this, the parent

adopts a very injurious method. The mother, in dread affright, seizes the child's hand. The infant is frightened by the suddenness of the seizure, and thus a habit of being terrified at fire is engendered.

Again, the child is admiring a *spider*. "Oh!" screams the affrighted mother, "kill it, kill it." The child is torn away with horror: screams—and the words "nasty things," applied repeatedly to the poor spider, ever after identify in the child's mind the spider with that which is horrible; whereas the poor spider ought to be associated with the most pleasing feeling, as illustrating the peculiar power of instinct, in the wonderful skill manifested in that beautiful construction, the *web*: or the parent might take advantage of the following little tale by William and Mary Howitt, to explain some of the habits of the spider, in a simple, and at the same time, most effective way.

THE SPIDER AND THE FLY.—AN APOLOGUE.

A New Version of an Old Story.

" 'Will you walk into my parlour?' said the Spider to the Fly,
'Tis the prettiest little parlour that ever you did spy;
The way into my parlour is up a winding stair,
And I've a many curious things to show when you are there.'
'Oh no, no,' said the little Fly, 'to ask me is in vain,
For who goes up your winding stair can ne'er come down again.'

" 'I'm sure you must be weary, dear, with soaring up so high;
Will you rest upon my little bed?' said the Spider to the Fly.
'There are pretty curtains drawn around, the sheets are fine and thin,
And if you like to rest awhile, I'll snugly tuck you in!'
'Oh no, no,' said the little Fly, 'for I've often heard it said,
They never, never wake again, who sleep upon your bed!'

" Said the cunning Spider to the Fly, 'Dear friend what can I do,
To prove the warm affection I've always felt for you?
I have within my pantry good store of all that's nice;
I'm sure you're very welcome—will you please to take a slice?'
'Oh no, no,' said the little Fly, 'kind sir, that cannot be,
I've heard what's in your pantry, and I do not wish to see!'

" 'Sweet creature!' said the Spider, 'you're witty and you're wise,
How handsome are your gauzy wings, how brilliant are your eyes!
I've a little looking glass upon my parlour shelf,
If you'll step in one moment, dear, you shall behold yourself.'
'I thank you, gentle sir,' she said, 'for what you're pleased to say,
And bidding you good morning now, I'll call another day.'

" The Spider turned him round about, and went into his den,
For well he knew the silly Fly would soon come back again:
So he wove a subtle web, in a little corner sly,
And set his table ready to dine upon the Fly.

Then he came out to his door again, and merrily did sing,
'Come hither, hither, pretty Fly, with the pearl and silver wing;
Your robes are green and purple—there's a crest upon your head;
Your eyes are like the diamond bright, but mine are dull as lead!'

"Alas, alas! how very soon this silly little Fly,
Hearing his wily, flattering words, came slowly flitting by;
With buzzing wings she hung aloft, then near and nearer drew,
Thinking only of her brilliant eyes, and green and purple hue—
Thinking only of her crested head—poor foolish thing! At last,
Up jumped the cunning Spider, and fiercely held her fast,
He dragged her up his winding stair, into his dismal den,
Within his little parlour—but she ne'er came out again!

"And now dear little children, who may this story read,
To idle, silly, flattering words, I pray you ne'er give heed:
Unto an evil counsellor, close heart and ear and eye,
And take a lesson from this tale, of the Spider and the Fly."

Many of the great truths of nature the child thus learns by the manifestation of the horror of parents or of servants at the expected violations of them. The child has thus attached the feeling of fear to those grand laws, which, instead of exciting fear, ought to be made the means of exciting love to the Creator.

Now these laws should be taught as parts of the grand system of benevolence, established by the great Author of the Universe, for the good and the happiness of man. They should be instilled into the child's mind. That they can be, there is no doubt: and this conviction is strengthened by the well-known fact that the grandest truths are established by the simplest experiments; and those, who have perused Dr. Arnott's interesting work, must know, that, even the commonest playthings are made use of by that writer to explain some of the grandest principles which Newton's genius developed.

It is true these things are thought to be above a child's comprehension; and to many it may seem little short of a visionary's view to propose to educate children by presenting such food: it seems, therefore, proper to notice two or three more circumstances in reference to the greater number of children, satisfactorily establishing the delight they experience in prying into the causes of things.

In fact, the love of destruction, which is thought to be peculiarly developed in children, because, in a short time after possession, they begin pulling the eye-moving dolls, the ba-ing balambs, the music box, the barking dog, to pieces—ought to be referred to the desire on the part of the child, to inquire into the cause of the eyes moving, the lamb ba-a-ing, the music box playing, and the dog barking; and is an operation of mind exactly similar, in nature, to that which is called forth by the philosopher, when comparing the phenomena connected with the motion of the heavenly bodies, with the principles laid down by Newton. In fact, the supposed inability of children to understand these laws of creation is more frequently the result of the real inability, on the part of the parents, to

explain the phenomena of nature in accordance with these laws. The child is discouraged in his attempts to attain to a knowledge of the causes of things.

How common is it to hear a child ask, "*Mamma, why do you stir your tea?*" And what does wise Mamma reply ?" "My dear, do not ask such foolish questions." The child is convinced that the question is very far from being foolish. The child tries again, and asks his mamma, "*Mamma, my dear mamma, do tell me why you have a black handle to your teapot?*" "Oh, my dear," replies the intelligent mother, "how vexing you are with your questions: come here, let me kiss you." The child's face gets a kiss: but, it was the INTELLECT THAT WANTED TO KISS TRUTH. The child is disappointed; disappointment follows disappointment; and the child falls into a state of stupid simplicity, and is called "a good child." "How I dislike good children," said an intelligent mother, who well understood the nature of education.

We often learn what a thing *is*, by what it is *not*. It may therefore be most useful in learning what is proper food, to point out what is not; and, in doing this, we shall have an opportunity to illustrate one of the incidental propositions already stated: namely, "THAT THE PAST AND PRESENT SYSTEM OF EDUCATION CONSISTS, IN A GREAT MEASURE, OF THE PRESENTATION OF IMPROPER FOOD, OR, IF OF PROPER, IT IS PRESENTED EITHER IN AN IMPROPER WAY OR AT IMPROPER SEASONS.

Let us take a cursory view—The child leaves his mother; he goes to school; learns his alphabet; he then gets on to *a-b ab, a-c ac, a-d ad;* and is tormented with *spelling.* He then gets into *reading;* and is made to read pieces which he does not understand: and the fools torment him because he does not read with emphasis. There is, it is true, great improvement. Mary Howitt's Sketches from Nature, lately published, is an excellent work: and the Book of Extracts used by the schools at Edinburgh, formed upon Mr. Wood's plan, is excellent: and many other books, published by Darton and Harvey, are excellent.

He then proceeds to Johnson's Dictionary, which he thumbs and fingers well, and learns like a parrot, not understanding one word in ten. He gets a hatred of school, of books, and of dictionaries. His marbles become his god: his "toll," or rather his "alley," as he calls it, becomes the object of his first love. You will find his hands perpetually in his breeches pocket—and why? because, his talisman is there. It imparts an abstraction to the operations of his mind—an abstraction so strong, that the master is constrained to disturb the reverie by the electric stroke of the cane; when in the sudden convulsion, produced by the shock, the toll, the superficies of which he was examining by the tactual extremities, and the prowess of whose mighty deeds he was mentally recapitulating, escapes from his pocket, rolls upon the floor—is captured, and is lodged among the manifold curiosities in the well-known desk; which, when he stands around in future, is looked upon as a detested mausoleum, because containing the imprisoned object of his early attachment, and shutting it out from his morning, noontide, and evening exercises.

The *organ of language* is thus cultivated: he learns *words* but not *things*. After a time, perhaps, he proceeds to Latin and Greek; he still cultivates the organ of language. He now is engaged in learning *three* names for one thing; thus for the being called a man in English, he learns in Latin that *homo* stands for the same being, and in Greek *ανθρωπος*. This truly is an important acquisition! Years are, in this way, if not wasted, at least spent injuriously; for if the boy should happen to *understand* what he reads, his mind is polluted,—his safety is dependent upon his not understanding.* The classic writings are a sink of impurities. Look at the polluted works of an Ovid, and the debasing (if understood) bucolics of a Virgil. He is led to sympathize with suicide in the person of the unhappy Dido, who destroys herself when deserted by the base Æneas. He then proceeds to the addresses of Horace to the Prostitutes; whom, if elegant verses would immortalize, he has immortalized. He then is brought in contact with all the basest passions, clothed with the dignity of Deity, in the persons of the gods in splendid poems: and, thus he travels on, increasing his knowledge of words, and therewith augmenting his knowledge of every thing polluting and polluted, when these words convey to him their meaning.

He obtains associations, mis-styled *classical:* all things Roman and Grecian become hallowed. The splendour of their antiquity hides the baseness of their nature; he becomes acquainted with Trajan's column, and idolizes the man because others idolized him. Whereas, if properly taught, he would look upon Trajan, notwithstanding all the sneers and extenuations of the dishonest Gibbon, as one of the greatest monsters. It was he who murdered Ignatius, exposing him to be destroyed by wild beasts in the amphitheatre at Rome—he it was who gave orders for the destruction of all Galileans—he it was whose blood-thirstiness so tired Pliny the younger, as to induce him to write the celebrated epistle regarding the Christians.

He thus becomes a *classical scholar;* his mind is clogged with words; and, if with sentiments—with sentiments saturated with vice. Fortunately for most, the parental means will not enable them to allow their children to go further. They go into the world and find of how little use their education has been: struggling, if morally minded, against the sensual awakenings, which the recurrence of passages from classic works to the memory induces.

If, however, the son is to go into the Church, he goes to college; and there he is enabled to put into practice all the luxurious sensualities: he returns home; meets his college chums at the various clubs; tells how he has sucked "the old fellow;" can tell the goodness of a horse; can descant upon the delicacy of a wine, the flavour of the venison, the richness of turtle; can prove, logically, that

---

* A gentleman, when the writer of this expressed his astonishment to him that he admitted a certain Sunday obscene journal into his house, replied, that by watching the countenance of his wife when she read it, he had observed that she did not understand the hidden sensualities, and therefore it could do her no harm.

black is white, and white is black; and finds that his greatest enemy is unflinching integrity united with solid truth.

Such is the improper food presented to the intellectual faculties, or, if proper, not presented in the proper way.

We shall now take a brief view of improper food presented to the MORAL and RELIGIOUS FACULTIES.

If we examine the progress of the education of the human being, we shall find that, generally speaking, from the dawn of childhood to mature old age, every food that can stimulate the *animal* feelings into activity is presented.

Children, in the innocence of infancy and childhood, are *free-masons*. We have a beautiful instance of this in the affecting interview of Hector with Andromache and his child. The warrior is clothed with his casque, and takes the child in his embrace; the child screams, the casque is removed; and the child loves his parent.

Children, to illustrate, can tell whether or not a person really likes them. The pretender they soon discover. Perhaps he is a rich old uncle. The mamma wants to curry favour with the old gentleman. The child is taught, if contrary to its will it is no matter, to go and sit on the old man's knee; and be teased by him till the old gentleman is tired. If the child shows any signs of uneasiness, any desire for freedom; up rises the finger, and a significant look, as much as to say, "*Act the hypocrite.*" When the uncle is gone, the child receives a lecture, and is told to behave better next time; for uncle is rich, and will give him money to buy horses, tops, and other pretty things.

Again, the child may be a candid child; and "I don't like you," bursts forth like a clap of thunder upon the astonished parent. Perhaps it is some great personage in the family circle. Mamma and papa exclaim against this candour, "You should not say this, dear." "You should never say, dear, you do not like any one." "But, mamma, I do not like him, mamma," is the child's response; "You are a naughty child. I shall punish you, if you say so again." Thus secretiveness is called into activity under the power of cautiousness. The child is taught to become a hypocrite.

Another evil is the habit which parents have of telling children, not to tell down stairs what they hear up stairs: and the servants telling the children, not to tell up stairs what they hear down stairs. Another evil is, that, in trying to avoid this evil, good parents often fall into an equally great evil; namely, that when a child begins to tell the tales of the nursery or of the kitchen, they stop the child and say, you should not tell tales. The best way is to let the child finish his story, but ask no questions. Listen to his story, not to offend his self esteem: ask no questions, you will not encourage the habit.

It may be asked, do you approve of children being allowed to make such observations. I answer, no. But the avoidance of such expressions, as induced by appeals to the child's love of approbation, his cautiousness, and his secretiveness, is very different from the same result as obtained by instructing the child that there is some-

thing to be loved in almost all persons; and endeavouring to depict those beauties of character, which may, it is true, be seen only in the back ground of the picture, and may require some minute observations to discover them.

Another evil. A child endowed with large intellectual organs, and with large secretiveness, is generally witty, and makes many ludicrous remarks. The parents are pleased; they laugh at his exhibitions; the child is thus encouraged; steps beyond the bounds of decency; and becomes a pest, not only to his acquaintance, but to his parents. They check him now it is too late. He cannot very well perceive, why his parents should scold that at *seven* years, which they praised at five. A habit of lying in joke is thus engendered. For it will be found that the greater number of witty expressions consist of a mixture of falsehood and truth.

Some children, who are endowed with large organs of language and of individuality, find pleasure in learning passages to repeat by art. The child learns a number of passages, and whenever there is a party, little Johnny, dressed in his Sunday clothes, comes before the company and repeats, with his hands behind him and in a beautiful monotony of voice,

> "My name is Norval; on the Grampian hills
> My father feeds his flock;"

One person pats him on his head, and says, "what a clever boy;" another puts an orange into his hand; another slips a sixpence into his pocket; and thus his love of approbation, and his acquisitiveness become active; and he is led to look upon learning, not as a source of pleasure to himself and others, but as a means of getting plums, pennies, or praise. He becomes a human parrot; a selfish prater; he thus grows up in selfishness.

But we will allow that he may have some proper food given him in his youth. He may be taught the *sciences*, previously to entering upon the pursuit of some profession. He may be taught mechanical philosophy, and become acquainted with the wonderful means by which the Creator has suspended the starry world, through the wide regions of space. He may be taught *chemistry*, which will open up to him wonders that the human mind can, in its uninformed state, hardly conceive of; and show how the wisdom of the Creator has operated in producing the utmost variety of useful objects, by a slight variation in the number or in the arrangement of their atoms. He may learn anatomy, by which he becomes acquainted with the wonders of the human structure—wonders which will justify the place man holds in the terrestrial world.

But though he learns all these things, he, instead of being led to admire, and wonder, and love the Creator, as Galen was on merely seeing a human skeleton, remains unaffected by all these manifestations of Divine wisdom and intelligence; or, if affected, it is only by the feeling of delight at the prospect thus opened up to him, that, by the aid of this knowledge, he has increased his means of benefiting himself, at the expense of his neighbours, not so informed.

These sciences, which ought to be so many intellectual ladders, leading, like Jacob's, from earth to heaven, become the encouragers of infidelity; for the youth, in ascertaining the causes of the grand operations of nature, looks upon these *second* causes, or rather the effects of the first cause, as the final cause, and forgets the Deity, the great source of all action. It is a curious fact, illustrative of the infidel tendency (that is when the food is presented to minds in the state of selfishness just noticed,) of scientific studies, that many of the most talented of our philosophers are infidels. It is true, that many young men pretend to be infidels, because it is thought manly; to these little puny butterflies, we make no reference; we refer to men of real science, to men of morality.

Let us now turn our attention to that part of education relating to the RELIGIOUS faculties, or those faculties more particularly relating to the Creator. Very improper food has been presented to these faculties; and food, in itself proper, has been presented in an improper way.

To illustrate: Parents act most unwisely in this matter. Instead of allowing children to learn the truths and the duties of religion, as matters of inference, from the interesting tales of Scripture, they seek to impress on their children "*abstract doctrinal truths.*"

Thus the Assembly's Catechism is taught to almost every child in Scotland. One of the first questions is, "*What is the chief end of man?*" The answer is, "To glorify God and enjoy him." Now, here is an abstract truth. The child cannot comprehend this. He asks, "What is it to glorify God?" and is told to be "a good boy;" and, to be a good boy, is to do as he is bidden.

The poor little fellow finds it to be a very difficult thing to be a good boy, according to the definition of a good boy, generally held by such individuals; for to be "a good boy," consists in submitting quietly to every whim of those who are in a middle childhood: in sitting down at table as stiff as a poker: in repeating slowly a grace before meals, of which he does not understand one word: when speaking candidly, to be told that "little boys should not tell what they think:" in sitting down every Sunday, and reading the Bible very slowly to the good father—the father not taking the trouble to select passages which will interest the child, such as the history of Joseph: in receiving quietly, when asking for any explanation of that which he is reading, the command "Go on:" in going to church and sitting still with his little eyes fixed on the minister, pretending to listen to all that the preacher may say, whereas, perhaps not five sentences in the whole sermon are intelligible to the sham listeners. If going to sleep, to be waked by a rough push. When the hymn comes, the child is obliged to stand up, and if he does not sing the father pushes him in the back and says, "Sing, sing;" whereas the sentiments that the child is called upon to sing, he cannot understand; and they may be such, that, in singing them, he tells a lie, and states that he feels what he never has felt.

The child being taught, that, in these things consists the glorifying of God, finds the giving glory to God a very burthensome duty; and is led to hate religion, which is represented as con-

sisting of such practices: whereas, were the child taught that God's glory consists in the happiness of his creatures, and in their fulfilling those beauteous intents which He has ordained them to fulfil: namely, enjoying all the delights of acquiring and giving information; prying into the wonders of Nature, and gratifying all the powers of the intellect; enjoying all the pleasures connected with the animal feelings, to an extent and in a way so as always to make them pleasant; and studying to make others as happy as he can, thus diffusing peace on earth and good-will among men—we should find that the child would readily acknowledge that this is God's glory, and that his own dignified happiness consists in giving glory to God.

Again, let us take up another book, namely, "The Second Catechism without Proofs," published by the Sunday School-Union. We open it, and find Question 1, "Dear child, do you know what you are?" "I am a creature of God; for he made me both body and soul." Question 2, "How do you know you have a soul?" "Because I find something within me that can think and know, can wish and desire, can rejoice and be sorry, *which my body cannot do.*" Let any person reflect upon this process of reasoning, and what will be perceived? that it is a tissue of absurdities. What child can tell the difference between "wish" and "desire;" between "thinking" and "knowing;" and how can he tell that the body could not do these things? Why one would conclude that the child, as he says it is *something within him*, would infer that his body could do all these things.

Having thus pointed out what is improper food, we shall, in the next Essay, describe what is proper food, and how that food may be presented in a proper way.

DROWNING-AT-SEA SOCIETY.—OBEDIENCE AND HAPPINESS—DISOBEDIENCE AND MISERY.

To the Editor of the Christian Physician.

Sir,—On the 1st of July last, I underwent a pretty sharp cross-examination before a Select Committee of the House of Commons, on the causes of shipwreck; G. F. Young, Esq., Ship-owner, being one of the Committee.

When I retired to bed that night, reflecting on what had occurred, I fell asleep, and dreamed that I was permitted in turn to take the chairman's seat, and examine an active merchant-ship-builder, who is also an underwriter.

I, of course, called a gentleman, whom I knew to be capable of giving full information, and whose station in society would justify the belief, that he was incapable of denying just inferences; though, of course, I could not expect, that, having a large interest at stake, he would be anxious to produce a strong conviction in the minds of the committee against that interest.

The following examination was the imagined result:—

Q. What is your profession?—*A.* I am a merchant, and a ship-builder.

Q. Is it, in your opinion, the interest of a merchant ship-builder that ships should be lost?—*A.* I am unwilling to answer that question in the direct terms in which it is put, because it would imply a direct contemplation of the loss of human life as a source of human profit; but, of course, I cannot deny the general proposition, that the *loss of ships creates the necessity for building more*, and supplies *the means by which the ship-builders live.*

Q. Is it the interest of the builder that the ship should be durable?—*A.* It is not.

Q. Is building new ships, or repairing old ones, most profitable?—*A.* Repairing old ones considerably.

Q. Is not that an additional inducement to build ships so that they will soon require repairs?—*A.* Yes.

Q. You are also an underwriter. Is it the interest of an underwriter that ships should be lost or preserved?—*A.* That there should be frequent losses.

Q. How do you explain that?—*A.* Profits to an underwriter arise from the surplus of premiums received and remaining after paying for losses. If there were no losses of ships and merchandize, no premiums would be paid. Prevent frequent shipwrecks, and the underwriter's occupation is gone. By wrecks, and loss of ships, and merchandize, therefore, does he make his living.

Q. Are not marine insurances a species of gambling?—*A.* As an underwriter, I decline to answer that question.

Q. Are not marine insurances carried on by a knowing party, say underwriters, against an unknowing party, say the public, who pay for all losses by means of premiums of insurance?—*A.* As an underwriter, I beg to decline answering that question.

Q. Do you carry on any other profession, besides a ship-builder and underwriter?—*A.* Yes, I am an extensive ship-owner.

Q. Supposing the freight of a vessel either to be paid in advance, or to be fully insured, and the vessel also fully insured, and to be totally lost, would you lose any thing?—*A.* Not a sixpence.

Q. If the vessel, and its freight, under such circumstances except the loss, after receiving damage on a rock, sand bank, or lee shore, was preserved in a damaged state, what would be the consequence to the owner?—*A.* The consequence would be, that she must be repaired; and, after she was repaired, the underwriter, although she was insured to the full value, would pay only two-thirds of the repairs, and this only nominally; for I, and every ship-owner of any experience know well, that, although they profess to pay *two-thirds* of the repairs, yet, in practice, the case is reversed, and it costs the owner two-thirds of the repairs, or at least, of the expenses incurred by the vessel in damage.

Q. Then, does not this operate as an inducement to a ship-owner to wish for a total loss of his vessel, when she is exposed to danger, rather than have her preserved in a damaged state, to saddle him with these expenses?—*A.* That is a matter of inference of which I would rather that others should judge for themselves.

Q. It has been urged, that it is quite practicable to build safe ships, which would prevent most wrecks, but that the owners object to the additional cost, alleging that with dearer vessels, they could not successfully compete with foreign shipping. Do you concur in this?—*A.* Yes, I do, as to the competition with foreigners. As to the prevention of wrecks, I decline to give an answer.

Q. Have not British ship-owners a monopoly of our Colonial trade?—*A.* Yes.

Q. A witness has stated to the committee, that for a sixth part additional cost, expended on the hull of a vessel, he could give her ten times additional safety. Do you admit that he could do so?—*A.* I beg to decline answering that question.

Q. Supposing a vessel to have cost, say £3,000., and to be totally lost on the passage home from Jamaica, with a cargo of sugars and rums, value £7,000. with freight, ship, and cargo, fully insured, who bears the loss, this being a case where you could not suffer competition from a foreign ship-owner, because British ship-owners have a monopoly of this trade?—*A.* The public, or the consumers of sugars and rums, I presume, bear the loss.

Q. If for £500. additional laid out on the vessel, she would have been preserved, value £3,500. the cargo also, value £7,000. making the total £10,500. preserved to the public or the consumers, would not the whole amount have been thus preserved?—*A.* As to the point of giving ten times additional safety, for a sixth part additional cost, I have declined to give an opinion, but under the circumstances stated, it would be against the interest of the ship-owner to have his vessel preserved.

Q. How do you explain that?—*A.* He would lose the interest of £500. additional capital, and have to pay the insurance on that additional sum embarked in the vessel; he would have to pay two-thirds of the expence of damage to the vessel, besides the wages and the victualling of the master and crew, although she was fully insured; he must lose any profits she, or another vessel in her room, would have been making whilst she was undergoing the repairs; he must put up with a vessel depreciated in value from having been ashore, her age would be still increasing, and operating against her preserving her class in Lloyd's Register Book of Shipping. For all which reasons, although the property might have been preserved to the public, it would be a loss to the ship-owner.

Q. As an abstract principle, is safety to their vessels, when they are exposed to danger, and fully insured, wanted by ship-owners, supposing safe vessels could be got as cheap as unsafe ones?—*A.* I decline to answer that question.

Q. It has been imputed that there is a combination of the interests of ship-builders, underwriters, and ship-owners, against the interests of the public. Is there, in your opinion, any foundation for that imputation?—*A.* I decline to answer that question.

Here a gentleman, who had been reading "Marshall on Classification of Merchant Shipping," rose, and very irregularly addressed the committee, urging that no ship-builder ought to have been on the committee, and mentioned the name of one of the worthy and

disinterested members; but the intruder was silenced by loud cries of order, and exclamations that the worthy member had been appointed by Parliament, which was, of course, conclusive. Some of the members of the committee seemed anxious to hear the gentleman further, but in the confusion I awoke.

I am, Mr. Editor, your obedient servant,

JAMES BALLINGALL.

Kirkaldy, Sept. 20, 1836.

THE DISSENTERS AND ESTABLISHMENTS.

The friends to religious freedom are at last roused to action.

A Metropolitan Anti-Church Rate Society has been formed of men determined to seek equality in matters of religion.

Power never yields but to greater power, and this is especially true of political power.

In this country, government did not originate from, but grew over the people, and it yields only upon compulsion.

The Dissenters were promised relief, and waited with patience, but statesmen's promises are not made to be kept: if they involve concession to the many, they are fulfilled when they are enforced.

The Dissenters were promised and postponed, and the Establishment was sought to be increased; that is, the people were neglected whilst a sect were cared for.

A plan, disguised as a plan of Church Reform, was introduced; and, like all plans originating from those who have interested objects to answer, instead of relieving the pressure, it is to increase the weight, and fasten the burden still closer.

It is a re-adjustment of the saddle, and an increase of the weight to be carried.

The people, who complain of the number already, are to have *two* more bishops. They asked for bread, and the clergy offered them stones.

The people sought relief, and the clergy, professing to give it, strengthen the straps and increase the load.

When speaking of these holy men we are naturally led to the Scriptures, and we opened upon the conduct of Pharaoh to the children of Israel.

Moses and Aaron were reformers, and they declared the sufferings of the people to the king; and Pharoah said,—

"Let there be more work laid on the men, that they may labour "therein;

"And the taskmasters of the people went out, and their officers, "and they spake to the people, saying, thus saith Pharoah, I will "not give you the straw.

"Go, get your straw where you can find it; yet not aught of your "work shall be diminished.

"So the people were scattered about throughout all the land of "Egypt to gather stubble instead of straw.

" And the taskmasters hasted them, saying, fulfil your work, your " daily tasks."

The people in this day have thought they gathered only stubble from their priesthood, forgetting the spiritual manna vouchsafed to them. The clergy therefore responded, " Fulfil your tasks."

The priesthood of that day was a wicked priesthood, but we are blessed with a most religious and holy clergy, who care for the flock ; and, knowing that it would perish without protection, are especially careful of the fleece.

It was right in the children of Israel to work out their Exodus, but the clergy think it would be wrong for the people to work out their deliverance from the Archbishop of Canterbury, and his brother bonzes.

The Holy Ghost has, if we may believe their oaths, endowed them with the spirit, not of covetousness, but of love for the flock. Unlike Pharoah, who doubled the burden, they have merely added two to the number to be provided for.

Before the plan effecting this was proposed, we were among those of whom it is written, " Blessed are they who expect nothing, for they shall not be disappointed."

Hope is a miserable medicine, and should never be taken by men who can help themselves. The government, fortunately, dispelled the delusion, by refusing to name any effectual plan of relief, and the Dissenters are now erect.

Men should demand, not petition for justice.

The time has gone by when Dissenters will wink at religious intolerance, whether it makes free with their liberty, or with their chattels.

They must now agitate—the clergy do not like agitation; learn why.

Some maggots once got into a fine cheese—they were then lean and hungry—they soon became lusty and vigorous.

Corruption is instinct with life, and they multiplied like locusts.

The farmer came, saw that his cheese was rapidly decaying, put in a scoop, and the maggots called the scoop an agitator; they hoped, by abusing the scoop, to gain a reprieve ; but men have an antipathy to maggots, and the farmer saw that but for the scoop the whole of the cheese would have been lost.

Agitation produces health and vigour; stagnation disease and death.

Movement is essential to health ; and it is because the clergy are tied down by creeds and oaths, and are then rivetted by interest, that they stagnate and smell in the nostrils of the people.

If the clergy did not agitate the consciences and the pockets of Dissenters, Dissenters would not disturb their dulness.

The clergy raise the disturbance, and then condemn the noise.

" Don't scream," said reynard, when he seized the goose. Agitation may be good for *you*, but for *me* it is an unhealthy practice.

Just in this way do the established Clergy by the Dissenters, when they force money from them to support a worship which they cannot offer, and then rebuke them for remonstrating.

With the established clergy it is "no cash no gospel;" but when they have found the people content with the gospel without the clergy, they shout, "Pay or go to jail."—"Your cash, or manacles."—"Give us your *free-will* offerings, or your beds to the broker."—"Feed us, or you shall be starved upon prison allowance."—"Wash the surplices of ourselves and of our choristers, that they may sing us songs in white, or you shall moan in solitary cells."—"Give us money for bread and wine, or you shall have bread and water."—"Pay for chiming our bells, or you shall hear the clanking of chains."—"Pay for our church coals, candles, and mats, or you shall do without either in the county jails."

And yet these are the gentlemen who say "Don't agitate."—"It is your duty to submit to the law." Indeed! why then did *they* not submit to the catholics? If it is the duty of Dissenters to build strange altars, and support worship which they think false, or to die quietly in prison, who shall justify Cranmer, and the reformation?

Dissenters think and act for themselves in matters of religion.

They build their own places of worship, pay their own ministers, form and discipline their own churches, not by an Act of Parliament model, but by what they esteem to be the scriptural mode. They are not sworn to a plan of discipline, nor to a mixed or other creed, in their youth. They worship in the liberty wherewith Christ hath made them free.

The established sect wrested *their* places of worship from those with whom they had worshipped in common: forced from their former brethren the glebe and the incomes which sustained the buildings, the altars, and the poor: gave the estates to their clergy, who threw off the poor, refused even to repair their houses of worship, apprenticed themselves to the state, and engaged to think and worship agreeably to Act of Parliament. The Book of Common Prayer was converted into a long Act of Parliament, and established by law. The king was placed at their head, thus tying religion to politics. Their clergy are bound to their creed, and they have ever since uniformly prayed, as "miserable sinners," for kings, princes, and all in authority under them. The union amounted to a corporate purchase of a perpetual mass; and though they have taken and retain the price, they insist upon Dissenters bearing the cost of their covenanted loyalty. Whilst they so act, they may truly say, in the words of their own liturgy, we are "miserable sinners, and there is no help in us."

It is a duty incumbent upon Dissenters to protest against the injustice—to endeavour to enlighten the established sect—to teach them that religion does not consist in cash—and is not, like war and tyranny, to be supported by forced exactions; that its essence is peace and equity, not strife and inequality; that all are equal, and *only* equal, in the sight of God, and in the right to approach his throne; and that any inequality founded upon merely religious profession, is "of the earth, earthy;" of the world, and worldly; of the flesh, and carnal.

Just men must seek to convince this sect that it is as iniquitous to compel men to support the Church of England, who do not think

its worship conformable to Scripture, as it would be for catholics, the more ancient sect, to compel them to furnish incense for their altars.

They must be instructed that they are inflicting wrong in the name of christianity; that the great moral precept of its Founder, DO UNTO OTHERS AS YE WOULD THEY SHOULD DO UNTO YOU, is forgotten by their clergy in principle and practice.

Let us now consider what a CHURCH RATE is.

A meeting to make a church rate is a meeting to make legal an exaction from *all* men to pay the expenses of a *few* in worshipping God.

A church requiring this, must be lukewarm in religion, for such a meeting proceeds from the assumption, that it has lost the affections of the people, and that those whom policy induces to profess its tenets, have so little love for it, that they will not, of their own free-will, support the altar at which they kneel.

A church in so acting commits an act of impiety.

Insincerity in worship is impiety in action; that worship cannot be sincere which is forced; nor can those be honest who enforce it.

To compel men to support altars from which what they esteem to be false worship is to be offered, is not to consecrate, but to desecrate, the offering; is to commit impiety, not to offer reverence; is to enforce idolatry, the sin which is especially denounced in the Scriptures.

They are benighted on the subject of civil and religious liberty, and the right of individual judgment in matters of religion, and need to be led, until the scales shall fall from their eyes, and they shall know Christianity.

Let us consider the nature of this union of priestcraft and state policy.

CHURCH AND STATE means religion and politics tied together.

An established church is an aggregate of restrictions banded together, to restrain religious freedom within the bounds of worldly policy.

"A RELIGIOUS establishment forms no part of christianity!

"No usage, law, or authority whatsoever, is so binding that it "need, or ought, to be continued, when it may be changed with "advantage to the community. The family of the prince, the order "of succession, the prerogative of the crown, the form and parts of "the legislature, together with the respective powers, office, dura- "tion, and mutual dependency of the several parts, are all only so "many *laws*, mutable like other laws, whenever expediency re- "quires, either by the ordinary acts of the legislature, or, if the "occasion deserve it, by the interposition of the people."*

Wherever there is an established church, christian liberty does not exist. To the extent to which that church is priveleged, other churches are deprived. It is impossible to create something out of nothing, and privileges are created out of privations.

---

* Paley.

Freedom from restraint or disability on account of religious opinions, constitutes religious liberty. This liberty is given by God, and exists independently of society. Society does not give it, but endangers it.

The only legislation upon the subject of religion, which can be justified, is that which restrains, not that which creates the power of one sect to interfere with others.

A man who settles in the back woods of America, is in no danger of any interference with his mode of worshipping God, until other men settle around him. When a second settler arrived, the only thing either could properly do if he felt uneasy at the other's faith, or mode of worship, would be to argue with, and endeavour to persuade him; and when the third came, the safety of the three would require, that each should be protected against the combination of the other two; they might create the power to coerce or inflict evil; and it is obvious, that this is a risk which the first settler would not have been subjected to when alone.

All sects are tolerant, when weak; persecuting, when strong.

Sectarianism is separation from others, induced by the paramount influence of some one notion, text, opinion, or doctrine, to which the separatists give primary importance.

In the absence of power, it expends itself at the utmost in aversion; but give any sect power, which is an active, not a negative principle, and it becomes persecuting.

Persecution is engendered of pride of opinion spawned into power, and is rendered peculiarly active and bitter when strengthened by worldy interest.

"Let us consider," says Dr. Watts, "that the great God, our common Maker, has never given one man's understanding a legal and rightful sovereignty to determine truths for others; at least after they are past the state of childhood, or minority.

"No single person, how learned, and wise, and great soever, or whatsover natural, or civil, or ecclesiastical relation he may have to us, can claim this dominion over our faith. St. Paul, the apostle, in his private capacity, would not do it: nor hath an inspired man any such authority, until he makes his divine commission appear.

"Our Saviour himself tells the Jews, that if he had not done such wondrous works among them, they had not sinned in disbelieving his doctrines, and refusing him for the Messiah. No bishop or presbyter, no synod or council, no church or assembly of men, (since the days of inspiration,) hath power derived to them from God, to make creeds or articles of faith for us, and impose them upon our understandings. We must all act according to the best of our own light, and the judgment of our own consciences, using the best advantages which Providence hath given us, with an honest and impartial diligence, to inquire and search out the truth; for every one of us must give an account of himself to God. To believe as the church believes, is but a sorry and dangerous faith: this principle would make more heathens than christians, and more papists than protestants, and, perhaps, lead more souls to hell than to heaven; for our Saviour himself has plainly told us, that if the

blind will be led by the blind, they must both fall into the ditch*" —"The Scriptures are oracles for mankind, whose love embraces all countries, and whose voice sounds through all ages."

The Scriptures speak to the universe: the creed-makers speak to a sect. The Scriptures proclaim God and the resurrection to to man; creed-makers proclaim themselves and their own conclusions.

The Scriptures give us the message of God upon the authority of the Most High. A creed gives the conclusion of the creature upon the authority of the creature.

Creeds teach men and children to assume things without evidence—to receive without investigation—to assent because others have assented; and they lead men to think they know a thing by teaching them to rehearse it.

A creed first teaches the mind to believe, not to investigate, and then leaves it under the delusion that it sees.

The priest of the sect, when he teaches the creed, teaches it as a truth, and never intends to raise the disposition to question it. He sows conclusions because they form the creed of the sect, and not because they are true: the creed *may* be true, but it is the creed, and therefore it is that it is taught.

We cannot help believing what appears to us to be true. If the propositions expressed in a creed are understood, and believed because they are understood, they are then believed as truths *because of the evidence*. If they are not believed, the profession of the creed is hypocrisy; and if they are not understood, they are but blind words: either way therefore a creed, as a fixed standard, is useless.

Creeds are pernicious, for men are thereby made positive and dogmatical, and these dispositions colour their mental habits; and thus, is heaven's highest gift corrupted in its exercise. Corrupt the intellect, and you weaken if not destroy the affections. To impose a dogma is to apply a ligature, and the result is to deaden, corrupt, and destroy.

Creed-makers bind the Scriptures to human compositions—they limit the words of Omnipotence addressed to the universe, by the narrow conceptions of the creature, and the span of a generation. Our Lord came to bear witness to the truth, that the truth should make men free. The creed-maker limits the spread of truth, and pronounces, "Thus far shalt thou go and no farther." God spake to the universe, "I am the Lord; hear the words of the Lord your God." The creed-maker assumes the authority of Omnipotence, places himself in the judgment-seat, speaks to a section, and profanely exclaims, "I am the expositor of the Most High, 'Thus saith the Lord.'"

God raised up his own messengers, and confirmed the message they delivered, by miracles, wonders, and signs, the only test of a divine message. The creed-maker, without such warrant, assumes to expound Omnipotence, and declare his counsels; and the creed-

---

* Logic, part 2. c. 3. sec, 4.

makers of the established sect have impiously commenced and wound up one set of their assumptions in these words, "Whosoever will be saved, before all things it is necessary that he hold the catholic faith. Which faith except every one do keep whole and undefiled without doubt, he shall perish everlastingly."

"This is the catholic faith, which, except a man believe faithfully, he cannot be saved." *

It is an act of impiety for creatures thus to assume the power of God, and to declare that the eternity of happiness or misery of God's creatures is dependant upon the adoption of their opinions. It is making themselves judges, and Omnipotence their executive.

Our Lord and his apostles avouched the authority of God, and stamped the Scriptures with the fiat of the Most High. The Scriptures are fountains of living waters; creeds are standing, and therefore stagnant pools; and an established sect and an established clergy are necessarily affected by their noxious influence. The stream of intellect can no more be made to stand still and remain healthy, than stagnant pools to preserve their purity. An established sect is necessarily averse to religious and intellectual progression; its own wings are clipped, it cannot fly—it can only limp, and that within the range of a prescribed circle.

The parsons of the established sect are, as such, the creatures of the statesmen of the day, and they become of necessity a muster-roll of statesmen's tools. They are a body of professional contradictions—professors of religion, but life apprentices to politics and worldly policy. There are amongst them good and excellent men; but that is a coincidence, not a consequence.

They are bound to a creed; and that creed is to them the test to which they are compelled to make the Scriptures the commentary. They have given bond for their faith, and their tithes are a standing retainer in favour of things as they are. Their minds are under covenant, not to run away from the prescribed Shibboleth. When they are ordained priests, their minds are cut out and cut down to a pattern, and no room is allowed for the increase of their faith, or fresh accessions of knowledge.

They are in mental fetters; they have *sworn* to their creed; they have been bound by oath not to exceed in religion, the mental altitude of their youth—their intellectual vigour has been seared in the spring-time of its growth, and their generous affections not being allowed to expand into the universality of gospel freedom and benevolence, have been turned upon themselves; and been productive of the selfish exactor—the stern ruler—the haughty priest—the partial magistrate—the minister, not of peace, but of bitterness.

It is notorious, that there are clergymen of the established church whose tithe-barns are their temples; and to whom tithes and church rates are the sum and substance of religion; who have no other notion of religion than as a trade whereby they live; who think that the shedding of blood, and the destruction of human souls in this life, are justified to secure these exactions.

---

* St. Athanasius' Creed.

It is notorious, that clergymen have headed soldiers, trained to the work of human slaughter, to enforce these exactions at the point of the sword.

We know that a dignitary of the church, with soldiers in his train, and the word of God in his hands, swore his parishioners to pay his tithes at a future day; and thus, as far as depended upon him, placed their souls against his tithes in the balance of eternity: who exclaimed to the widowed mother, whilst her murdered son was yet bleeding, and that blood shed by the soldiers who followed in his train, "WIDOW RYAN, WILL YOU PAY ME NOW?"

This man had sworn he was called by the Holy Ghost to take upon himself the care of the eternal interests of the beings he thus treated.

For the sake of tithes and rates widows have been made to mourn, and children to cry over the bodies of their murdered husbands and fathers; sisters over their murdered brothers; and Ipswich Gaol, as well as Gurtroe, has borne testimony to the universality of clerical love for the souls and the chattels of the people,—the last of these two, being the first-born of their affections.

As the leaders and mouth-pieces of a sect, sworn to creeds and glued by interest, they can only be the tools of their creators.

It is a law of nature, that the creature shall obey the creator; that the tool shall execute the workman's will.

Hence the established clergy have ever taught, not civil, but servile obedience. Obedience, not because it was reasonable and right, but because it was commanded. They have preached not the emancipation of mind, but the prostration of the understanding. As to men's rights, they have always been abolitionists. They live by virtue of a positive enactment; they are the leaders of but one sect amongst many; they will not pay to any, yet they insist upon cash from all. They are spiritual soldiers, with carnal appetites, and permanent billets. They insist upon present cash for future promises, and are furnished with legal arms to enforce the delivery. Their interest is to confound religion with policy. They insist upon Mammon in possession, and promise the kingdom of heaven in payment, without having made a deposit to answer their drafts. Wherever the people have been left to their instruction alone, the established clergy have acted upon the fallacy, that a little knowledge is a dangerous thing, and carefully kept the flock in ignorance.

In times of war, that game which kings play at, with fools for chessmen, the clergy have hallooed on the leading gladiators, and taught the people that religion was subordinate to politics, that patriotism delighted in human slaughter, and that glory was born of human gore.

The people now know that when war was the trade of monarchs; sinecures, and places, and plunder, the share of the aristocracy; and taxation, the debt, and pauperism, the result to the people; that a state clergy sanctified the wholesale wickedness by pronouncing those wars "just and necessary," and offered up praises and thanksgivings to God for the destruction of his creatures.

If an established clergy did not, upon the whole, work with the

powers that create or preserve them, they would cease to be: Of this they have ever proved themselves conscious.

When men are first called upon to subscribe to articles of faith, and then receive retaining fees to the extent of millions annually, upon condition that they continue in that faith, they must, as a body, uphold the creed to which their minds have been first bent; their interests hold them down; they must, as a body, be the upholders and teachers of the creed prescribed for, not deduced by them.

If men so circumstanced—and the clergy are so circumstanced—are the teachers of truth, it is an accident, not a consequence.

It is impossible to unite a church of Christ with the state, that is, religion with politics; there is an extent of liberty and individuality left to the creature by the Creator, which is inconsistent with those restraints and positive laws, which control men in their civil relations.

The religion of the Saviour was given to the world, to the universe—not to a nation: it was given not to princes, to governments, or nations, as such, but to man. My kingdom is not of this world, said our Lord. It is of this world, say the established sect, and we will incorporate it with this world's leaven and institutions.

If to impose their creed upon strangers be not impious and wicked in the Englishman of the episcopal sect, neither would it be in the Hindoo, the Tartar, the Mussulman, the Chinese. If this be right in the English clergy, it would be right in the Bramins, the Bonzes, the Mollahs, and the Muftis and Dervises of any other sect.

History shows that this union, which we have thus argumentatively affirmed to be impossible, never has, in fact, existed.

No established church has ever been united to the nation, meaning thereby the people, in the scriptural sense of the word union, that is to say, ONENESS IN SPIRIT; the necessity of imposing it, and of sustaining it by authority, is contradictory to the scriptural idea.

The scriptural idea of a united body, is that of men thinking and acting together from the same convictions, having the same views of duty, of religious obligation, and of religious worship.

Union and compulsion are signs of antagonist ideas.

Religious union leaves each at liberty to follow the dictates of his own opinions, to unite when agreeing, and to separate when he can no longer conscientiously unite. But the union with the state, that is, a politico-religious union, cannot allow this liberty: it must coerce; it must exact; it must compel; it must fix a standard; that is, it must make a creed; and that creed must be enforced, or it would be useless to make it; and to admit the scriptural idea would be to admit the seed of its own dissolution.

Establishments and creeds are, therefore, opposed to the Scriptures, and to the nature of religion, which is an affair between every man and his maker; and is equally opposed to true worship, which is the spontaneous voluntary offering of a sincere mind.

Power in matters of religion therefore is, by wise men, to be suppressed, not created. To create an establishment is to create this power, and to unite worldly interests as an inducement to its exercise.

Let us shortly consider the evils which are necessarily attendant upon establishments.

Establishments necessarily involve the exaltation of some over others. It matters not whether the religion of the established sect is the religion of the majority; that fact would not touch the principle, it would only vary the degree of injustice. When they are the minority, the injustice is only the more glaring.

Paley yielded the whole argument when he said, and truly said, that religious establishments formed no part of Christianity.

To establish a sect under the notion of supporting religion, is, in effect, to make a law to this effect: "Be it enacted that the Scriptures are insufficient to sustain christianity, and that the word of the Creator needs the support of the creature."

It is the tendency of exclusive privileges to produce exclusive spirits. No church can maintain its purity to which such privileges are given, nor can its ministers maintain their humility, when they are thus taught practically to believe that they are greater than other men. The privilege itself corrupts.

An establishment with tithes, exacted from all sects for the clergy of one sect, is, in effect, an enactment that every nine men in their journey through life shall carry the tenth and his family.

All men ought to exert themselves against such an arrangement, because it takes away the tenth of the strength, given by God to enable each to discharge those natural ties, which, by the constitution of nature, God has himself cast upon them to maintain their own children, and support their own household.

An establishment is the parent of spiritual pride; spiritual pride, of persecution. Men who possess any privilege for a time, however unjust it may be towards others, will consider those who oppose it as their enemies. Possession begets an ocean of right, and then interest and self-love present an effectual barrier against the admission of the truth.

In those things men are the creatures of custom.

Custom is to society what habits are to individuals, and society submits to the one as the man is subdued by the other: hence the importance of sound principles in the organization of any society, and the obligation upon every member of that society, to point out those errors of principle which he sees, and to resist by all moral means the imposition of them. He should not even wait until the evil has happened, but act upon the principle of the mariner, who properly cries out "Breakers a-head," without waiting until the ship strikes. Men are justified in opposing every principle which is inconsistent with equal religious rights; but the possessor of a privilege—this word privilege is only a dress word for inequality—though he would unite with them in resisting other cases of injustice, will generally be found arrayed against the application in the instance in which justice is opposed to his own interest.

Privileges, are generally retainers against truth and equality—they furnish motives to mind-twisting—they are temptations to mental obliquity, and like visual obliquities, prevent men from looking right on—they incline the possessors to withhold, not to present, the right hand of fellowship.

Revelation teaches that all men are equal in the sight of God—it knows of no distinctions except obedience and disobedience to the commands of God. We have this truth from God himself, and no sect, or power, or union of men, or dicta of any kind, can be of equal authority. An establishment and creeds proceed upon a negation of this primary truth, and establish distinctions founded upon dogma.

Religious establishments are necessarily opposed to the education of the people, for they begin by fixing a standard of truth and worship, and constituting into a sect those who subscribe or assent to that standard.

Those who create establishments must fix a creed. To establish a creed in religion, is to assume the attributes of infinity, and to presume to certify what shall be eternal truth. When man shall have an infinite intelligence he may assume this authority, but not till then.

There is an eternity between the being who is just dead, and the being who is just born; yet, in creed-making, the ephemeral of yesterday has presumed to say to the beings who come after "Thus far shalt thou go and no farther," and that upon a subject on which God himself has spoken in the Scriptures.

A PHRENOLOGICAL ACCOUNT OF JAMES C. B. HAWKINS.

Read at a meeting of the Anthropological Society of London, May 26, 1836, *by* John Isaac Hawkins, *on presenting three casts, namely, one of the head, one of the outside of the skull, and one of the inside of the skull.*

The principal part of the paper which I am about to offer to your notice, having been read to the London Phrenological Society, April 19, 1830, and published at Edinburgh, in the seventh volume of the Phrenological Journal, page 26; I should not presume to take up the time of this meeting in reading a second-hand paper, had I not been pressed so to do by several members, who have neither seen nor heard the account.

There will, however, be some novelty in the present communication, since I shall remark upon the Editor's omitting to publish what I considered, and what, after six years of reconsideration, I still hold to be a very important part of the paper, as pointing out a new view of the functions of an organ but little understood, and which suppressed part is now restored to its original situation.

I allude to my observations on the organ of wit, which the Editor, with an unaccountable degree of timidity, kept back; perhaps, because it was apparently adverse to the orthodox Phrenology of the day.

But it is very satisfactory to me to perceive that similar views are opening to phrenological vision; several articles in late numbers of the Phrenological Journal approximate towards my notions;

and some papers read and speeches delivered at various meetings of the Phrenological Society, have leaned in the same direction; and thus phrenological orthodoxy is threatened with innovation, and I rejoice at it, because I have a rooted aversion to the principle of orthodoxy in every form, whether in religion, in science, in politics, or in phrenology. For orthodoxy implies a belief in a finished system, a concluded whole, which is complete and requires no further investigation; orthodoxy, therefore, tends to the stagnation of the human mind.

Phrenology shows us that those who think at all must think according to their peculiar organization, and hence no one can have views perfectly alike to another. Uniformity of opinion, therefore, instead of being desirable, is to be regarded as evidence of blind assent on the part of some to the dictation of others, which ought never to be encouraged.

I would not be understood to express a wish to infringe the liberty of those who feel pleasure, or imagine profit, in submitting to the yoke of orthodoxy, nor spend one moment in labouring to dissuade them from it, for orthodoxy may be of use to those minds which require to be led, they having no power of directing their own thoughts, and who, if they were to attempt to think for themselves, would, to a certainty, think wrongly. It may be beneficial for such persons to find minds or parties on whom they may rely for the tenor of their thoughts; to such the bonds of orthodoxy may be advantageous.

But although this state of mind has prevailed, and still prevails to a considerable degree, it does not hence follow that this situation of things ought to continue. It is the imperative duty of society to institute measures for enlightening of the ignorant, and placing them in a condition to think for themselves. At all events, it is the bounden duty of society to labour assiduously in establishing means of so training up the rising generations, that no one shall arrive at maturity without the most diligent endeavours having been employed in exercising his powers and faculties, to the end that the utmost degree of expansion of which these powers and faculties are susceptible, may be promoted.

No human being, born of what parents soever he may, ought to be allowed to attain to years of maturity, without the endeavour having been made, to place him, on his entrance into active life, on a perfect equality with the mass of the community; and society will never fulfil its duty until education of the highest grade be attainable by all its members. The operations of Providence appear to be opening a way for advancing the condition of man.

The omission of the passage on wit was not at all necessary to editorial irresponsibility, since, if the opinion was heretical according to Edinburgh orthodoxy, I should have been known as the heretic, and the Editor not only have escaped censure, but would have gained credit for liberality.

With these preliminary remarks, I proceed to the account of the interesting boy whose conduct, while living, excited my philoprogenitive feelings into a state of intense and delightful activity,

and whose memory is affectionately cherished by all who had the great pleasure of knowing him.

James Chalmers, the youngest son of a serjeant in the Royal Artillery, was, on the death of his parents, adopted by me and my wife, and we gave the child the additional names of Burgess Hawkins, intending to bring him up in the belief that we were his real parents, and he was generally called James Hawkins.

It appears that Chalmers, by a life of industry and frugality, had saved a considerable sum of money, which he was induced to trust into the hands of the notorious Sir Gregor Mac Gregor, soi-disant Cacique of Poyais, and receive Poyais bank notes as security for the same.

Chalmers, with his wife and three sons, then turned of one, three, and five years of age respectively, sailed about the year 1823, in one of Mac Gregor's ships to Poyais, where, instead of finding a commercial bank to cash his notes, he could not even find a bank of earth to screen his family from the driving of the storm over the extended marshy plains; and the whole family had to sit during two entire nights of heavy rain, under the imperfect shelter of a single umbrella.

The hardships which they suffered, in common with numerous other deluded families, brought on diseases, which terminated the lives of the parents on board the ship in which the distressed family were returning home.

The youngest child, James, the subject of this sketch, was, at the time, reduced by dysentery nearly to death.

A common sailor, named John Paxton, took the helpless infant to his berth, washed it, cut up his own shirts and made clothes for it, gave it medicines, nursed it, and fed it for six weeks, till the ship arrived in the Port of London.

The destitute condition of the three orphans was publicly stated before the lord mayor, and a subscription set on foot for their support.

On seeing the case mentioned in the newspapers, I felt a strong impulse on my mind, to go and adopt the youngest of the three, and bring it up as my own. I applied to the gentlemen managing the subscriptions; and after much unaccountable difficulty during ten months, succeeded in rescuing the child from the workhouse, where it was on the point of being sent, the subscription fund being nearly expended.

James was near two years and a half old, when I took him home; he was universally noticed, as remarkably intelligent for his age.

I immediately commenced teaching him the alphabet, but in several weeks, he made very little progress in learning the *names* and the *forms* of the letters.

After wasting much time in this fruitless endeavour, and wondering that so very intelligent a child should yet be so dull, I pondered the subject well, and saw the gross absurdity of attempting to teach a child the letters, independently of their use, and concluded, that the alphabet ought to be placed at the end, rather than at the beginning of the primer.

I then began at once to spell and read to him, without requiring him to *commit either letters or words to memory*, but directed him

to look at that part of the book to which I pointed, and repeat after me.

His progress in learning was now so rapid, that in a few months, when little more than three years of age, he would take such words as Nebuchadnezzar, Belteshazzar, &c., and spell them for mere amusement; and, in a few months more, when only about three years and a half old, would read the historical parts of the Bible with so just a feeling of the sense, that he generally placed the emphasis in the right place, and rarely had to spell a word, however long or difficult.

Before he was four years old, he knew the names, the characters, and the qualities, of almost every tree, plant, and weed in my garden, and delighted in plucking the weeds as fast as they appeared; and so great was his discrimination, that he was never known but once to take up a plant instead of a weed.

At four years old, he could readily repeat the botanical names of the twenty-four classes of Linneus, and frequently determine the class and order of a plant, on inspecting the fructification.

At four years and a half old, he knew the names and figures of numerous geometrical solids, and took delight in repeating the most difficult names, such as bi-pyramidal dodecahedron, and rhomboidohedron.

At this time also, he was well acquainted with the natural history of animals, and would readily and copiously state the habits, climate, figure, colour, or food, of almost any animal named to him.

Before he was five years old, he knew the characteristics of a great variety of minerals, and at five, was well acquainted with various constellations of the heavens, and could, at a glance, distinguish the planets from the fixed stars, and the principal planets from each other.

In chemistry too, he could tell the constituents of several substances, and was fond of enquiring the chemical composition of almost every thing that came before him; and, when once told, he did not easily forget.

At five years and a half old, he pressed to be made acquainted with the structure of the human body, and soon learned the Greek names and the uses of numerous bones, and acquired extensive notions respecting the muscles, tendons, arteries, veins, and other parts. About this time he met with some mythological notices, in a little book of Arts and Sciences, and eagerly enquired the history of various heathen gods, and heroes of antiquity.

He learnt, in little more than an hour, the names of the thirty-five Phrenological organs of the brain, and in a day or two afterwards, from studying a marked bust, could point out the localities of the organs, on the head, with surprising exactness.

He made great proficiency in English Grammar, and knew much of the Latin, and somewhat of the French languages.

His favourite playthings were carpenter's tools, and he would amuse himself for many hours together, in making rude boxes and boats; and when a penny was given to him, would send more frequently to the ironmonger's for nails, than to the pastrycook's or fruiterer's for any of their dainties.

Business calling me to Germany, I determined to take the child with me, for the sake of continuing my care of his education. He was in such extacies at the thoughts of seeing the sea, ships, high mountains, and the ruins of antiquity, that he took leave of his adopted mother without a tear, yet he loved her with as perfect a filial affection, as any child ever felt for a real mother, for he had no suspicion of her being otherwise to him.

Upon our going on board a steam packet in the Thames, and being surrounded by the shipping, the effect of so novel a scene on his young mind was exceedingly interesting. He asked a multitude of questions as to the uses of the various parts of the vessels and their appendages. On observing the first anchor, he knew it from having seen pictures of it in books, and remarked that the anchor represented Hope.

His insatiable curiosity to know the names and the uses of every thing he saw flagged not during our passage from London to the North Sea, where we were overtaken by night. His questions at sea were quite of a philosophical character; as "Why are the tops of the waves white, while the rest part is green?" "Why do people print in books what is not true? I have read that the sea is blue, but I see that it is green."

At Rotterdam, our lodgings faced the river, where ships of various nations were riding at anchor. The boy stood at the window for hours together, and made pertinent remarks on the forms and the proportions of the vessels.

On first reaching the celebrated scenery on the Rhine, between Cologne and Mayence, he was somewhat disappointed. The mountains were not so high as he had imagined, but still he evidently felt the sublimity of the picturesque views by which we were surrounded. Ancient ruins on the tops of lofty rocks drew forth expressions of his admiration of the daring spirit that loved to dwell in such dangerous places.

Upon our arrival in Vienna, where we were to remain awhile, he began to make models of masted vessels; and it was surprising what accurate views of proportions he had acquired in one day in the Thames, and in two days at Rotterdam.

In a few weeks, when only about six years old, he finished a fair proportioned sloop, a brig, a ship, and a steam packet: in which he fixed the masts at their proper distances, quite upright, when seen endwise of the hull, and leaning at a proper angle towards the stern. He cut out the sails, hemmed their edges, sewed them to the yards, and hoisted them with running rigging; made anchors of iron wires, hammered and filed into figure, and chain cables of several hundred links; and never forgot a gallant streamer at the top of each mast.

Ship building continued to be his most favourite amusement during our stay of eighteen months at Vienna: and, at about seven years of age, he finished a stately model of a man of war of 150 guns, the guns all made of brass tubes of his own forming. Each of the masts was composed of three pieces, put together as lower mast, top mast, and top-gallant mast, there were regular round tops, and cross-trees, stays, shrouds and bulwarks, nineteen sails, all capable of being

hoisted and lowered; an acting capstan, windlass, four anchors, chain and hemp cables, with rudder properly hung, and various other parts which he had learnt from observation, reading, engravings, and enquiry. He was employed upon this vessel almost daily, for two or three hours a day, during three or four months.

He constructed models of various other things; as of a grand pianoforte, from pasteboard, and painted it in a good imitation of black rose-wood; a harp, also of pasteboard, painted in imitation of the different kinds of wood he had seen in a real harp, and strung it with silver wire; numerous models of swords, of brass and iron wire, hammered to the figures of the ancient knights' swords, the Turkish scimitar, and the swords of various regiments in the Austrian service. With the peculiar costume of each regiment, he was well acquainted, from his own observations; he made the scabbards of paper, united with gum, and painted them with correctness.

Soon after he was six years old, I took him to the theatre to see a pantomime, he was highly amused during the representation; upon leaving the theatre, he dwelt much on the scenery and the costumes of the various countries represented, and scarcely mentioned the buffoonery.

On seeing another pantomime of a very superior kind, he noticed with enthusiasm the moral instruction conveyed by the piece.

Statuary always drew his attention strongly; but on taking him to see a master piece of Conova, "Theseus killing the Centaur," he gazed with rapture on those two figures for nearly an hour, and begged earnestly that I would take him to see them another day, which I did, and his enthusiasm was scarcely less than at the first time; and he asked for, and obtained, a third visit.

After the second visit, I took him to see a very splendid pantomime, at the largest theatre in Vienna, with which he was very much entertained. Upon leaving the theatre, I asked him, which he would prefer going to see the next day, another pantomime or Canova's marble; he answered vehemently, that he would a hundred times rather see the statuary than a pantomime, of which he then spoke with sovereign contempt, as being unworthy of comparison with that masterly production of the chisel.

The museums of natural history presented the greatest attractions for him, and it was difficult to get him away from them, even at meal times, after several hours of keen inspection.

Collections of pictures of real merit always made a strong impression upon him, which corroborates the opinion, that nature has much more to do in the formation of taste than art has. Art may cultivate and improve taste, but cannot create it.

When he was about six years and a half old, I took him to witness the performance of a serious comedy in four acts; his whole attention was rivetted to the subject, and he formed so clear a conception of the plot, that five months afterwards, on that comedy being mentioned, he described several scenes, and repeated much of the language.

I afterwards took him to see a tragedy, in five acts; and here, although I was so used to the superiority of his feelings, I expected that his attention would flag before the conclusion; the contrary,

however, proved to be the fact, and he appeared to feel the most intense interest to the very last, and was able, the next day, to explain several points, which my imperfect knowledge of the German language, prevented my catching at the time. The hero of the piece was Wallenstein, a general of the empire, who proved a traitor, and declared himself emperor.

Several months after witnessing the tragedy the boy being ill, the servant said if he would take his medicine he should be an emperor, he exclaimed with vehemence, "I'll never be like Wallenstein!"

Wishing to observe the child under a great variety of circumstances, I took him to a masquerade; here he fell asleep in less time than was occupied on three acts of the tragedy, although 3000 people were parading the rooms, and multitudes of them in grotesque characters.

At this period, when we had resided in Vienna about a year, he spoke German like a native, and possessed a critical knowledge of the grammatical construction of the language. His tutor gave him lessons of double the length of those usually given to boys twice his age, yet he generally learned them, by merely reading them over two or three times. He could distinguish various dialects of the German, as the Tyrolese, Swabian, Bohemian, &c.

With the view of affording him a knowledge of natural history, without study, I purchased forty or fifty figures of animals, excellently carved in wood: for I sedulously avoided setting him to learn any thing except the German language.

After a day or two, he divided them into two companies, the tame and the wild.

The elephant he made emperor of the tame animals, and the lion king of the wild ones. He appointed field-marshals, generals, colonels, captains and others. He then occupied himself for an hour or two a day, for about three months, in making military dresses and accoutrements for all the animals. He formed a well-proportioned crown of gilt paper for the emperor, and another of silver paper for the king. He made caps, hats, helmets, cut out of pasteboard, gummed together in good shape, and painted to costume; cloaks, coats, and trowsers of silk and cloth, sewed together; boots of leather, and spurs of pasteboard painted; and, in one instance, brass spurs with revolving wheels; swords, scabbards, and a long train of etceteras, among which was a throne, under a canopy, for the emperor and empress.

When all were equipped, he divulged his plan for the first time: he said that a grand battle was going to take place between the two armies.

The battle lasted two days, during which time he amused himself, without any playfellow, with pretended marches, counter-marches, and alternations of victory and defeat: the officers going to head-quarters for orders, and communicating the same to other officers; the emperor ordering all his attendants away while he gave his commands to the field-marshal; and a great variety of manœuvres, proving the comprehensiveness of his views.

He made the fox come into the emperor's camp as a spy, where he was taken prisoner, and put to death; whose ghost appeared the next day in the emperor's pavilion, terrifying the attendants, but

producing no effect on the emperor. For the purpose of giving a death-like paleness to the ghost, he gummed a bit of very thin muslin neatly all over the face.

At length, the king's army was vanquished by the emperor's, and the lion became prisoner to the elephant; but was treated with royal munificence, and made an arch-duke of the empire.

The day after the battle, the child said the people must have a song of thanks to the emperor, which he composed. When he had written two lines, I asked to look at them, and found that he had not formed any notion of metre, accent, or measure; but fancied that the last syllables of two lines, being alike in sound, constituted verse. I explained to him the requirements of versification; and, in ten minutes, he wrote two lines in very good rhyme. The whole song consisted of six lines, written in good German, the English of which, literally, is—

"Our skilful emperor has won the day,
"Therefore, we must sing a song of thanks to him.
"We must praise our emperor,
"Because there is no one elevated above him.
"Our prudent emperor is our chief,
"And he has given the enemy a knock on the head."

To this song he wrote an imitation of the notes of a tune, but containing no air; indeed he never evinced any portion of musical talent beyond singing a common tune by ear. But the tune appeared to be felt by him as a necessary part of his drama.

The word of command was given in German, during the whole of the two days battle, although the greater part of the performance was conducted when he thought he was not observed or heard. I asked him why he spoke German so to himself; he said he could *think* better in German than in English.

One day, before he was seven years old, we walked up an exceeding steep path, to the top of Leopoldsberg, a mountain near Vienna. The walk was very fatiguing; but on looking from the top over the extensive prospect, the boy exclaimed, in a tone of rapture, "well! this is a great reward for all our labour."

From three years old and upwards, he always exhibited a strong feeling in favour of every kind of religious exercise: and from four years old would give out the lines of a hymn to be sung, with a highly devotional feeling, with so correct an emphasis, founded on the sense of the subject, and so totally devoid of any sing-song tones, that scarce one clergyman in a dozen could equal him. This was not the work of art; it was nature that taught him.

Often, when I have said at his bed-time, "now, my dear, the next thing is to go to bed;" the child, in his peculiarly mild manner, as if feeling a repugnance to contradicting, in any form, would answer, "not quite, papa, the Bible is to be read first." He scarcely ever forgot this, or his prayers.

Although in the constant habit of hearing my injudicious friends lavishly praise him as a prodigy of the highest order, he was never observed to utter an expression tending to court applause.

However agreeable it might be to him, he never exhibited any joy

at being applauded. He attributed all the praise to the kindness of the applauder, and none to his own merits. This may be supposed to be the effect of education, but no instruction can produce such a disposition, where there is not innate modesty.

His ready obedience to my commands was very remarkable, and scarcely more than once was he known to disobey my orders. In this case, at the age of six years, he was playing with a neighbour's son, of about his own age, in an adjoining garden ; I sent for him and he did not come ; I called him, and still he did not come ; I then fetched him, and gave him one slight stroke on the back, with a very thin twig, the only instance of corporal punishment I ever inflicted on him, and this left not the slighest mark. He stated that the boy persuaded him to stay, after he was called.

On reflection, he was so sensible of his fault and sorry for it, that he never afterwards would play with that boy, although we lived a year next door to him.

He was excessively fond of little infants, and at seven years old, generally went, for an hour every day, to play with a child of six months old; which he nursed with a tenderness, that astonished the good women of the place.

His desire of universal knowledge was most ardent, and his perseverance in the pursuit of information was like that of a most sanguine youth of eighteen, rather than of a child of six or seven. Indeed for the last year of his life, he seemed to me more a philosophical companion than a child.

He would, in a surprising manner, draw a chain of consequences from a single fact, evidently possessing an inward perception of the rationale of the thing; and would take notice, at a glance, of numerous qualities and circumstances of an object, which escape the generality of observers.

When I was preparing to leave Vienna for London, the child said he must write a farewell letter to his sweetheart (a girl of 19) ! He sat down, and in the course of about an hour of study, he wrote twelve lines, in passable German verse, of which the following is almost a literal translation. There is no addition to his meaning.

" Beloved Netti, I am going home,
" But to this place in twelve months hope to come.
" My ardent love for you has grown, at length,
" To love of more than six or sevenfold strength;
" You are my bride, and ever dear to me,
" Your skin is clean and fair, from blemish free,
" Your eyes are lovely, and your mouth form'd fine ;
" Beauty and health in ev'ry look combine.
" We will our children strive to multiply ;
" We'll teach them wisdom, elegance supply,
" If we should lose them we shall have great grief,
" For of enjoyments, children are the chief."

This extraordinary and most interesting child died of the croup, April 2, 1829, at Munich, in Bavaria, on the journey from Vienna towards London, at the age of seven years and five months.

After the death, I felt a strong desire to have a cast of the child's

head, but had not the courage to express that desire, being altogether among strangers, and totally unacquainted with the state of public feeling on the subject; I therefore went to the funeral at the appointed time, and was in waiting in the chapel of the burying-ground while the minister was performing the funeral service over another body. The sexton invited me and my party into a dissecting room adjoining the chapel: while there, a lady of rank asked me if I would not like to take the child's heart with me? I eagerly exclaimed, Yes, and his head too, if it were allowable! The sexton said "Oh! you may have any part you wish."

In about five minutes the minister returned to the chapel to proceed with the burial: the sexton immediately told him that my child was not to be buried that day, as it was to be dissected. The minister signified his acquiescence, in a manner that showed the thing to be of common occurrence; and all around seemed to view me with kindly feeling, for having so readily concurred with the suggestion.

A person went with me to the police office, where I requested permission to take the head, heart, and diseased windpipe of the child, with me to London. The magistrate superintended his clerk in filling up a printed blank with the particulars of my request, and waited in the office to sign the same. On my asking for the amount of fees, I was informed, that there were none to pay; a very un-English mode of doing public business!

The next day, I had a cast of the head taken, a copy of which I have just now presented to the Society. After taking the cast, the dissection was performed by a surgeon and his assistant, under the direction of the two eminent physicians who had attended during the illness. The physicians made out a bill of their charge for attending the dissection, which amounted to one pound, eight shillings and four-pence, for both; the surgeon's bill mixed the charge for the dissection with that for medicines and attendances during the illness, and, therefore, I cannot ascertain the exact amount, but I think it was about five shillings for himself and assistant. After the dissection, the remains were returned to the coffin, and buried according to the usual rites.

I have great pleasure in mentioning, that, during the child's illness, Lady Erskine, the amiable and excellent partner of Lord Erskine, then British ambassador at Munich, to both of whom I was unknown, called on me at my hotel, saying, that she had heard that an English child was ill there; she said that I might make my mind easy respecting the medical advice which I had called in, for that one of the physicians had saved the life of Lord Erskine, and both of them were physicians to the royal family, and of the highest repute, everything therefore would be done that the medical art could perform. She said further, that if I should think of any thing the child might take, that was not to be had in perfection from the Bavarian cooks, such as gruel, barley water, or any other article to which the palates of English children were accustomed she, begged I would not hesitate a moment in sending to her, and she would have it provided by her English cook, and immediately sent to me.

To be continued.

THE CHRISTIAN PHYSICIAN,
AND
ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

No. 4.] DECEMBER 1, 1836. [Vol. II.

LAWS REGULATING CIVIL AND RELIGIOUS OBEDIENCE. THE DISSENTERS AND ESTABLISHMENTS.

When a man has been robbed, he calls out, "Stop thief," not to inform the *gentleman* by whom he has been plundered, but to induce honest men to catch and correct him.

For the same reason, we seek to fix attention on those who lift our goods for Church-rates.

Convinced, as we are, that happiness results from obedience, and misery from disobedience to the Creator's laws: convinced also, as we are, that the laws of *man* are often in direct opposition to the laws of *God:* convinced further, that many excellent persons are in great doubt as to the limits where obedience to human laws ceases to be a virtue, and where obedience to divine laws requires *positive* but *passive* resistance to the former, we have great pleasure in introducing the 2nd Essay on Dissenters and Establishments, in which these limits are defined.

The established wrong, called the Established Church, (nothing is more common than misnomers), is going on foolishly, and, therefore, in our eyes, satisfactorily; that is, her clergy and their immediate tools are teaching the people, by their rapacity and tenacity, to spurn them. It is pleasing to see the covetous grasp thorns instead of wool. Every day presents evidence that the oppression has "bided its time;" that the Dissenters are putting forth their strength; and that they have only to do this, to be satisfied of its efficiency, to emancipate them from all religious disabilities.

When the burly and blatant founder of the established wrong was hurling the previous craftsmen from their seat, the present heavy tribe, in their hurry to huddle into the saddle, forgot that the time might come, when, following royal example, but having better reasons, the people might choose to stop with the load; and, if the riders did not get off, might further choose to lie down and roll over them. Their own greediness opened one way for shaking and dismounting them, having rendered it necessary to call the people together to make what are named "rates."

The former old lady—the established clergy call her the mother of harlots, and the eldest daughter ought to know something of the family morals, well then, Babylon's ——; No; we were about to apply the epithet which clergymen, and they are fluent practitioners in a peculiar species of vituperative bitterness when they are *up*, apply to their maternal ancestor: Well, then, to avoid defamation, the

former craftsmen had used to build the temples, and rear the altars, and gild the shrines, for their worship; but when kings or nobles have interfered with any thing, affecting the condition of the people, the good that has fallen to their share has been unintentional, and the direct, frequently the intended consequence of the benefit, has been to the people something worse; thus, so soon as Henry enabled the protestant hierarchy to get their broad expansions into the saddle, and they were sufficiently at ease to pack their trunks, it was found that they had secured the whole of the loaves and fishes for themselves.

While the former holy riders had not only built, repaired, and beautified the buildings and shrines, and provided for their own nephews and nieces, the newly installed clergy left the churches and altars to shift for themselves; for sons and daughters, it was found, had greater appetites than nephews and nieces; and unless the people would rate themselves, it appeared that not only might the churches tumble, but the sacrament itself go unadministered.

The people, therefore, were invited to *rate themselves;* and, in their blindness, consented to do so, just as they are *now* beguiled on various pretences of gifts of land, money out of the taxes, and other delusions, into creating new churches, over which they have no control, and to supply which, they must saddle themselves with an increase of disinterested clergymen, who *collect* for lectures, until, by the death of the incumbent, they are strong enough to cry out, pay, or we'll make you!

The direct consequence of the so called Reformation was, to take the incomes, out of which the catholic priests had maintained the poor, and upheld the churches, and to appropriate the whole to the clergy of the episcopal sect; leaving the poor to starve, the churches to fall, and the sacraments to go unadministered, but for the mercy and the piety of the ignorant laity.

The indirect consequence has been to create the necessity for appealing to the people to rate themselves, thus giving them the opportunity of showing to each other the history of the imposition and the rapacity of those who imposed it, and of uniting to get rid of it and of establishments altogether.

The prophet Isaiah, speaking of the gospel that would be preached by the Messiah, shadowed forth its spirit in these words:

"Ho, every one that thirsteth, come ye to the waters, and he that hath no money, come ye, buy and eat; yea, come, buy wine and milk without money and without price."

The clergy realized this view of the gospel by selling the people's goods and chattels if they came *without* money; by taking their milk and making them buy the wine for the clergy's use.

In the earlier ages the priest got so economical of the sacramental wine, that the laity were made to suck it through a quill, but this was before church rates were brought into fashion; since which, seeing that the laity paid for it, the clergy have allowed them to sip a little. The clergy are liberal when the laity find the cash.

Pursuing the means of redemption by legal agitation, quiet, consecutive, and persevering, as a rail-road to liberty, which has thus been left in their hands, the people are refusing the rate, they are

availing themselves, AS IT IS THEIR DUTY TO DO, of their rights, as citizens, to secure their religious freedom.

Every effort of this kind, which tends to connect religious duties and religious rights with men's rights and duties as citizens, with the every day business of life, will tend to satisfy them of the intimate connexion between civil and religious liberty; and will tend to make them sound and active politicians as well as theologians. They will be led to feel very generally the conviction, which has already spread to a considerable extent, that the Bible is the *great text book of equal rights and equal laws;* and that it is the duty of all religious minds to study its principles, with reference to their civil and political duties, as well as with reference to their religious convictions, and that they cannot spread the one without the possession of the other.

Religion, morals, policy, politics, social duties, are all *ribs proceeding from the same spine*, encased together, and forming one compact body; and the wider and the more rapidly this conviction spreads, the sooner shall we realize the great object of revelation, EQUAL RIGHTS AND EQUAL LAWS, REALIZING JUSTICE TO ALL. Equal rights and equal laws are the only natural and divine means by which to rear a selfish into a social and intellectual being.

It is pleasing to observe, that, many of the laity among the established sect have the good sense to see, and the justice to act upon, the voluntary system, and that they cordially unite in supporting that great religious principle.

We shall devote the remainder of this paper to showing, that it is the duty of christians *to insist upon and maintain their civil rights*, that *they may secure their religious liberties*, and to expose the *fallacy that it is the duty of men, on religious subjects, to obey a bad law whilst it is a law.*

Every right involves a duty, yet, upon questions of serious religious import, a large class of timorous men, of the doubting-castle school, are always found, who, though they see and verbally assent to the duty of asserting their rights, supinely submit to wrongs, forgetting the example of their excellent forefathers, and the duty they owe to their children, and to the church of Christ. They may be termed *assentors*, as distinguished from *assertors;* they fail to perceive that profession involves the duty of corresponding action. Those who proclaim the right of private judgment in matters of religion, and fail to contend for, and assert, by all lawful and peaceable means, its exercise, must, in a righteous judgment, be classed amongst those who knew their Lord's will, but did it not. This class are the drags upon religious improvement. They leave the efforts of the pioneers unaided, when aid is most needed; they are cyphers when they ought to be units; and are negatives when their profession and duties most require action. Such christians may be more fitly termed instruments than agents in working out the liberty of the gospel. Yet there is a point of time a which they increase the onward progress; and, that is, when, by the energy of more active and generous spirits, the movement is secured; then they trim their boats, glide with the stream, and add

strength to the current. The good they do is the result of the wise ordination of things by God, and not of a virtuous action willed into being by these his instruments. They follow afar off.

There is no sin in resisting injustice, but there is sin in yielding up the *charter of the Lord*, whereby he made them free.

Of such professors we ask, will it not be less sinful, if, in error, to be among those who contended faithfully for the churches freedom, than to be found in the ranks of those who yielded up to Man's authority the authority of the scriptures, and their own right to interpret them for their own guidance? In so doing they abandon the example of our Lord, and the apostles, and the prophets of God. Upon such a question, to set up the duty of civil obedience as paramount to religious obligation, is obviously to surrender the primary to the secondary.

It is our duty to obey the law, say the advocates of things as they are, and it is particularly incumbent upon christian men. To disobey a law of man's creation is not in itself sinful. No law of man can make that right which is morally wrong. *The passing of a law only embodies a power*, but if the *principle* or the *purpose* be *unjust*, it is simply *embodying a power to enforce a wrong.*

It creates a positive rule, but the wisdom and the justice of the rule are independent of the rule itself.

Those who submit in peace to see their goods sold to pay church rates, give an evidence of self-control, and of submission under circumstances peculiarly calculated to induce resistance; they give proofs of a meekness of spirit, which those of the sect, for whose benefit they are thus treated, seldom manifest. Imagine only, that the Dissenters of Bungay St. Mary, who have seen their neighbour torn from his family and incarcerated in jail for the non-payment of this rate, should assemble, and resolve that a rate for the repair of their chapels, and to provide them with choristers, should be raised from the parish, and that they sent a broker into Archdeacon Glover's parsonage, and took his tables and chairs, is it probable that he would imitate the meekness of the Dissenters? No. It may be said that it is not the law that he should be so treated; true, we answer, BUT IT WOULD BE EQUALLY JUST; the equity of the case needs no further argument; it is with the Dissenters.

The next stage of the question then is, *are men morally bound to obey an unjust law?* In this form, even, the question is much broader than christians, as such, have any occasion to argue it; for, upon a religious subject, the only question is, *Do the scriptures authorize the requisition?* Yet, in this more than necessarily extended form of the question, christians would stand justified in resisting the law by any means, *short of violence.*

Upon questions of religion, the scriptures are paramount as authority to the christian; and society, as it does not give him religious liberty, has no right, though it may have the power, to control him in religious matters. Even in civil matters, the people are not only the proper judges of the laws, but of what is a good civil government; and, although in this country they never have had the opportunity, a priori, of determining the form of their government, that does not affect the argument. What is a good

civil government, is a question of reason for their determination. It would be absurd to refer that question to the determination of the government; that would be to constitute the governors judges in their own cause. To make those, possessing power, the judges of its exercise is, in argument an absurdity, and in practice a despotism.

Nor is it an answer to say that the constitution has not provided for it; that may prove that the constitution is defective, but nothing more; the question is not what *is*, but what *ought* to be.

The duty of submission, therefore, is a matter for individual determination. An individual may determine erroneously; if he does, his error is not in exercising his right to judge, but in his conclusion. Upon these questions let us hear Dr. Paley: "We assign," says he, "for the only ground of the subject's obligation, THE WILL OF GOD AS COLLECTED FROM EXPEDIENCY."

"The steps by which the argument proceeds are few and direct. It is the will of God that the happiness of human life be promoted; this is the first step, and the foundation, not only of this but of every moral conclusion. Civil society conduces to that end; this is the second proposition. Civil societies cannot be upheld, unless in each, the interest of the whole society be binding upon every part and member of it; this is the third step, and conducts us to the conclusion, namely, that so long as the interest of the whole society requires it, that is, so long as the established government cannot be resisted or changed without public inconveniency, it is the will of God, (which *will* universally determines our duty,) that the established government be obeyed, and no longer.

"This principle being admitted, the justice of every particular case of resistance is reduced to a computation of the quantity of danger and grievance on the one side, and of the probability and expense of reducing it on the other.

"But who shall judge of this? We answer, EVERY MAN FOR HIMSELF. In contentions between the sovereign and the subject, the parties acknowledge no common arbitrator; and it would be absurd to commit the decision to those whose conduct has provoked the question, and whose own interest, authority, and fate, are immediately concerned in it. *The danger of error and abuse is no objection to the rule of expediency*, because every rule is liable to the same or greater; and every rule that can be pronounced upon the subject, (like all rules which appeal to, or bind the conscience,) must, in the application, depend upon private judgment. It may be observed, however, that it ought equally to be accounted the exercise of a man's private judgment, whether he be determined by reasonings and conclusions of his own, or submit to be directed by the advice of others, provided he be free to choose his guide.

"IT MAY BE AS MUCH A DUTY AT ONE TIME, TO RESIST GOVERNMENT, AS IT IS AT ANOTHER TO OBEY IT, to wit, whenever more advantage will, IN OUR OPINION, accrue to the community from resistance than mischief."—*Moral Philosophy.*

Nor will this reasoning involve licentiousness; for, though religious errors and opinions of every kind ought to be perfectly free, their professors are still open to coercion for any ACTS, injurious to society, which are to be corrected by power. Errors of opinion

are mere words, and can be met by argument; if they seem to *any* to need refutation. The instances from the scriptures, illustrative of the truths stated, are conclusive upon this subject.

The example which DANIEL and HIS FRIENDS have set before the church of Christ, and their miraculous preservation under circumstances precisely similar to those implied in the question we are now arguing, if it stood alone would be conclusive on this subject. We give the narrative of the case of the *friends* of Daniel first, and we insert the whole narrative, that we may not be supposed to leave out any circumstance, which, if inserted, would make against our argument. The case of Daniel will be considered in the second part of this Essay.

"Nebuchadnezzar the king made an image of gold; he set it up in the plain of Dura, in the province of Babylon. Then Nebuchadnezzar the king sent to gather together the princes, the governors, and the captains, the judges, the treasurers, the counsellors, the sheriffs, and all the rulers of the provinces, to come to the dedication of the image, which Nebuchadnezzar the king had set up. Then an herald cried aloud, To you it is commanded, O people, nations, and languages, That at what time ye hear the sound of the cornet, flute, harp, sackbut, psaltery, dulcimer, and all kinds of music, ye fall down and worship the golden image that Nebuchadnezzar the king hath set up: and whoso falleth not down and worshippeth shall the same hour be cast into the midst of a burning fiery furnace.

"Wherefore at that time certain Chaldeans came near, and accused the Jews. They spake and said to the king Nebuchadnezzar, O king, live for ever. There are certain Jews whom thou hast set over the affairs of the province of Babylon, Shadrach, Meshach, and Abed-nego: these men, O king, have not regarded thee: THEY SERVE NOT THY GODS, NOR WORSHIP THE GOLDEN IMAGE WHICH THOU HAST SET UP.

"Then Nebuchadnezzar in his rage and fury commanded to bring Shadrach, Meshach, and Abed-nego. Then they brought these men before the king. Nebuchadnezzar spake and said unto them, Is it true, O Shadrach, Meshach, and Abed-nego, do not ye serve my gods, nor worship the golden image which I have set up? Now, if ye fall down and worship the image which I have made; well: but if ye worship not, ye shall be cast the same hour into the midst of a burning fiery furnace; and who is that God that shall deliver you out of my hands? Shadrach, Meshach, and Abed-nego, answered and said to the king, O Nebuchadnezzar, we are not careful to answer thee in this matter. If it be so, our God whom we serve is able to deliver us from the burning fiery furnace, and he will deliver us out of thine hand, O king. But if not, be it known unto thee, O king, that WE WILL NOT SERVE THY GODS, NOR WORSHIP THE GOLDEN IMAGE WHICH THOU HAST SET UP.

"Then was Nebuchadnezzar full of fury, and the form of his visage was changed against Shadrach, Meshach, and Abed-nego: therefore he spake, and commanded that they should heat the furnace one seven times more than it was wont to be heated. And he commanded the most mighty men that were in his army to bind

Shadrach, Meshach, and Abed-nego, and to cast them into the burning fiery furnace. Then these men were bound in their garments, and were cast into the midst of the burning fiery furnace. Then Nebuchadnezzar the king was astonished, and rose up in haste, and spake, and said unto his counsellors, Did not we cast three men bound into the midst of the fire? They answered and said unto the king, True, O king. He answered and said, Lo, I see four men loose, walking in the midst of the fire, and they have no hurt; and the form of the fourth is like the Son of God.

"Then Nebuchadnezzar came near to the mouth of the burning fiery furnace, and spake, and said, Shadrach, Meshach, and Abed-nego, ye servants of the most high God, come forth, and come hither. Then Shadrach, Meshach, and Abed-nego, came forth of the midst of the fire. And the princes, governors, and captains, and the king's counsellors, being gathered together, saw these men, upon whose bodies the fire had no power, nor was an hair of their head singed, neither were their coats changed, nor the smell of fire had passed on them. Then Nebuchadnezzar spake, and said, Blessed be the God of Shadrach, Meshach, and Abed-nego, who hath sent his angel, and delivered his servants that trusted in him, and have changed the king's word, and yielded their bodies, THAT THEY MIGHT NOT SERVE NOR WORSHIP ANY GOD, EXCEPT THEIR OWN GOD." Dan. iii. 1—28.

It will be observed here, that the king, the princes, the governors, the captains, the judges, the sheriffs, the treasurers, and all the rulers of the provinces, had concurred in this dedication, and in passing and submitting to the law. *If, under any circumstances, it is binding upon men to hold their religious rights as subordinate to their civil duties*, it was incumbent upon Shadrach and his friends to submit to the law of the state, in which they had been raised to power and eminence, and to the authority of that king, under whom they had such high station. Now, mark how decisive, yet reflecting, is their language and conduct; they are careful to guard themselves against repudiating the authority of the king, and of the law generally; but they distinguish it as referrible to the particular case, in which a religious submission was required by the civil authorities.

"We are not careful," say they, "to answer thee IN THIS MATTER, our God whom we serve is able to deliver us from the burning fiery furnace, and he will deliver us out of thy hand. O king; but if not, BE IT KNOWN UNTO THEE, O KING, THAT WE WILL NOT SERVE THY GODS, NOR WORSHIP THE GOLDEN IMAGE WHICH THOU HAST TET UP."

They adhered to their determination, were committed to the flames by the law of man, and delivered by the power of God.

Thus we see that God set the seal of his approbation upon their refusal to worship AT THE ALTAR ESTABLISHED BY LAW, and sanctioned the supremacy of religious over civil obligations.

We challenge any person to point out a difference in principle between the conduct of Nebuchadnezzar and his princes, and governors, and sheriffs; and the conduct of the clergy in Ireland, at Gurtroe; in England, at Bungay; or at Edinburgh, in Scotland.

It is true the clergy did not at Bungay, or at Edinburgh, as their predecessors would have done in the time of their rampant and burly founder, Henry VIII. cast their victims into the flames, but they cast them into dungeons; and, at Gurtroe, the son was hurried out of existence by bullets, and, WIDOW RYAN, WILL YOU PAY ME NOW?" was the mass for the repose of his soul.

MUTUAL INSTRUCTION SOCIETIES.

SIR,—The nature of the "food" supplied by the *Anthropological Magazine*, proves that its readers will feel interest in all subjects tending to advance the cause of human improvement.

Of late years numerous small societies, conducted upon the *principle of mutual instruction*, have been formed, and carried on with varied success. Those most favourably circumstanced have had, at the commencement of their existence, many disadvantages to contend with, particularly the occasional want of lecturers and essayists, and the frequently total deficiency of apparatus, diagrams, &c. for illustration. Other societies, not being well supported, have been in a still worse condition, and are frequently compelled to discontinue their meetings, after praiseworthy, though ineffectual, attempts by those whose means for the acquisition of knowledge being small, sought to increase them by that which is so well calculated for the purpose, viz. *combination*. Such must be lamented; for demoralizing methods for passing away time, being numerous and enticing, are resorted to, and thus is civilization retarded. These evils have induced the formation of an association, having for its objects—the formation of a collection of diagrams, apparatus, casts, books, &c. for the use of members of the association, and of lecturers; to assist in the formation of mutual instruction societies, and to provide lecturers and teachers for societies in need; to collect and disseminate information relative to the best means of carrying the objects of these societies into effect. These objects to be effected thus—by 4s. annual subscription; by the loan and the donation of books, apparatus, diagrams, &c.; by the assistance of gentlemen willing to teach classes, and deliver lectures, gratuitously; and by other means.

Accordingly, a few weeks since, the association was formed: the government of the association, consisting of certain officers, chosen from among the members, at stated periods. The utility of such an association must be immediately perceived, since, if the necessary diagrams, apparatus, &c. can be obtained, it will afford to many the opportunity of imparting to others information, hitherto relatively unserviceable from the insuperable want of the requisite means of illustrations. In consequence of the small subscription, it was feared that some time might elapse before the association would be rendered extensively useful. Exertion was, therefore, necessary. It has been given, and with success, so far as to justify the expectation that, ere long, "The Popular Educational Association," will become an active engine for the advancement of the cause of intelligence and morality.—I remain, your's respectfully,

London Mechanics Institution, Southampton Buildings, Chancery Lane. J. F. HOLDERNESSE, Junr.

THE USES OF CHEMISTRY.

The following was delivered as an Introductory Lecture to the students attending the Hunterian School of Medicine, 16, Great Windmill Street, London, at the commencement of the Winter Session of 1836, by Dr. Hunter Lane; and contains such a clear, and, at the same, so interesting a statement of the uses of the science of Chemistry, which soon must form a part of general education, that we have considerable pleasure in referring to it.

Gentlemen,—In the pursuit of natural philosophy, and especially, that branch of it more immediately the subject of the present course of lectures, you, who are now entering upon the study of medicine, may be considered, in a two-fold capacity, to have a deep and serious interest; first, in regarding it as a part of that general education, which is justly held to be essential to the character of a British gentleman; and, secondly, in contemplating it as an indispensable constituent of that elevated course of study, which is to form the basis of your future fame as scientific medical practitioners.

Pursuing it as a necessary part of that system of polite education, which is, now, by the diffusion of knowledge amongst the subordinate ranks of society, necessitated to be possessed by the higher classes, that they may continue to maintain the superiority they have assumed, you are required to attain such a general familiarity with it as shall protect you against the dangers of detractive collision with your associates and contemporaries.

Again, as individuals who are to render it subservient to the use and practice of your profession, you are required to gain a still more intimate knowledge of its practical details than those who cultivate it only as a means of invigorating, advancing, and enriching their other attainments. Called upon, as you thus are, in a double capacity, to acquire a knowledge of general philosophy, and more especially of chemical science, you will find that its study and possession will yield you proportionately multiplied sources of enjoyment and advantage. To the pleasures such study will afford you in common with those pursuing it as a branch of general education, you will have superadded the pre-eminent gratification of witnessing its practical applicability to your peculiar science, and of being enabled to profit by its adaptation to its highest, noblest, and most useful purposes. In these two inseparable characters of gentleman and medical practitioner, I shall consider your interest in the study of chemistry particularly, and the natural sciences generally; hoping, by this course, ultimately to impress on your minds a conviction of their paramount importance,—their utility and value to you as medical students.

By one of the greatest men that ever lived, one of the most ambitious despots that ever experienced the glories of gratified ambition, or suffered the degradation of disappointed hopes of universal sovereignty, it was in a moment of blighted aspiration most sarcastically observed, that *England was an island peopled*

by shop-keepers. Had he designated it as the mart of the world, his sarcasm would have been as well appreciated, and his description more intimately allied to truth. England may, in very reality, be regarded with proud satisfaction as the emporium of the world, —the site of those arts and manufactures whence are derived the commodities essential to the comfort, the well-being, the happiness, and the luxury of the population of the whole civilized globe. These arts and manufactures are dependent for their advancement upon the cultivation and the application of the sciences; so that any individual taking an interest in the elevation of the national character must, of necessity, participate in the desire of seeing these sciences advanced. Whence we may infer, that a knowledge of these sciences should compose a portion of the national education; that it should be very generally disseminated through, and more particularly possessed by, that class of individuals, who are the constant objects referred to in questions comprehended by the natural sciences. More especially should such information be attained at the present period, when a spirit of enquiry seems to pervade all society; when an indomitable desire for scientific knowledge appears to impel every class of our community; when the previously neglected and uneducated classes of the British public have everywhere opportunities presented to them of possessing themselves of the treasures of the long-sealed book of natural wisdom. This necessity has been felt, acknowledged, and responded to. Knowing that ignorance can no longer hide herself under the garb of affected mystery or ostentatious technicality, it has been found necessary, in order to meet the criticisms of a more enlightened age, that the former system of education, so commonly confined to the classical field of literature, should now be made to embrace *an extensive knowledge of the physical world.* Thus, therefore, independently of the duty imposed on you by your contemplated professional association, you would feel yourselves unqualified to assume, and more especially to maintain, that station in society, which you may have been led to look upon as your hereditary due, unless you were familiarized with the constitution of the laws of those apparently commonest forms of matter, amidst which your lot is cast. The days have passed, in which a cultivated taste, a knowledge of languages, and a general acquaintance with history, will excuse a man for utter ignorance of the laws by which the frame of nature is sustained. Beside the business of active life, to which the non-professional, much less the professional, may be devoted, cannot suffer from such a preliminary knowledge; but, on the contrary, in all the paths of honourable ambition and laudable exertion, a general familiarity with the principles of philosophy and chemistry will not only prove ornamental and pleasurable, but useful and profitable. In our peculiar geographic and commercial position, how much more interesting then must such a study prove, in consequence of the power it lends to enterprize, and the ample resources it opens to commerce. Were it necessary to illustrate this position, and to demonstrate the invaluable aid such alliance must prove to the agents of commerce, innumerable examples might be directly drawn from mechanical philosophy to evince and establish the debt which

commerce already owes to the science, for the amazing means it has already contributed towards the attainment of objects which had otherwise been beyond the reach of human enterprise or human power.

The powers, which the engineer has derived from the knowledge of the hidden properties of combustibles, bear evidence to this truth. See to what advantage this information, acquired by experimental research and scientific enquiry, has been converted in this commercial nation. As an example, the most ordinary combustible, coal, may be adduced. It has been ascertained, and is now practically proved every day, that there exists in *a bushel of coals*, properly consumed, power to *raise seventy millions of pounds weight a foot high*. To estimate the benefits the exposure of these hidden resources of nature must prove, and the impulse their application must impart to the physical energies of a nation, we have only to see the purposes to which they can be appropriated, and to watch the result of their operation when so applied. An engine, in Cornwall, admirably illustrates the benefits man receives from thus drawing on science for the aid, which she can readily furnish from nature's riches. By means of this engine, the force put forth during the consumption of a single bushel of coals, actually raises seventy millions of pounds a foot high; and, by a still more careful combustion of the same quantity of material, it will even raise seventy-nine millions of pounds through the same space.

If, for the sake of showing the amazing powers that may be elicited from natural sources and converted to the service of man, we follow up this single instance, and imagine that the Menai bridge, an immense mass of iron, weighing not less than four millions of pounds, had to be raised to its present elevation of one hundred and twenty feet above the level of the sea,—this stupendous effect might be accomplished by the virtue inherent in seven bushels of coals. The great pyramid of Egypt, which is composed of granite, is one hundred feet in the scale of its base, and five hundred in perpendicular height, and stands on eleven acres of ground, is computed to be 12,760 millions of pounds at a medium height of 125 feet, consequently it could be raised by the effort of about 630 chaldrons of coals. It is calculated that the quantity of coal consumed annually in London, is capable of exercising a force adequate to raise a mountain of 2200 feet in the side on to another of a like elevation. The Monte Miovo near Pozzuoli, which was erupted in a single night by volcanic fire, might have been raised by such an effort from a depth of forty thousand feet, or about eight miles.

Such are examples of the forces, which science has shown us may be borrowed from nature; their combination and application to the accomplishment of purposes for commercial enterprise we need not here enter upon. The nation, whose population possesses the capabilities of rendering these forces subservient to its advancement, we may easily imagine to have an influence beyond the means of restraint; a power resisting all limitation; and to enjoy such means of general aggrandizement and multiplication of its aggregate strength, as must render it competent to effect, in an incalculably short period of time, results, which to people not so assisted, or to

nations, not possessed of that aid, which mechanical philosphy can supply, must have appeared unattainable; or, at most, practicable only by the exercise of the combined physical labours of an almost interminable succession of generations.

If this be the consequence of the application of the laws of purely mechanical philosophy to the practical purposes of the arts, we may readily conceive how much this will be increased, and its practical value augmented, by the accession of those other principles and laws, which chemical science can contribute and render available to the mechanician: *the expansive force of aerial fluids*, and solid matters,—the tremendous powers that may be called into action by the combination of the elastic invisible airs. The minutest portions of solids, &c. may all, at some future period, be found capable of being employed in a variety of useful ways, according to the emergencies that may call for the ingenuity of man in subjecting them to his service.

But there is yet another, and, perhaps, a more interesting point of view in which the application of physical science may be regarded. *I mean the adaptation of physical principles and laws to the immediate advancement of our arts and manufactures.* There can be but few so forgetful as to need being reminded of the amazingly rapid progressive strides, which the arts and manufactures of this country have made within the last century. Every observant mind must be struck with the certain simultaneous advances which these make, and the regular coincidence of their improvements with the dissemination of a knowledge of the physical sciences, as also with their more general cultivation, and with the more intimate alliance that is daily becoming more firmly established between them, and the practical departments of the manufactures.

In this island more especially, but also over the whole of the European continent and British possessions, is this truth acknowledged, as it is every day testified by the immense wealth derivable from every new association established between the discoveries of science and the purposes of art. Chemistry stands a pre-eminent exemplification of the value of such a practical combination. Every branch of art has felt its influence, and instances are continually starting forth of the unlimited resources which this science developes in the most sterile parts of nature. It would be unnecessary to bring forward the various processes; dyeing, bleaching, &c., as performed fifty years ago, and compare them with the processes of the present time, when chemical knowledge has shown means of attaining the same end, that require neither one half the time, one half the labour, nor one half the cost they then required for their attainment. These facts are familiar to all; and, to those individuals, who may not be acquainted with the manner in which this simplification of the several branches of art have been effected, and have kept pace with the progression of chemical discovery, we shall have abundant opportunities, during the course, of showing. I nevertheless cannot avoid soliciting attention to the amazing result produced by a discovery of one of the brightest ornaments of modern philosophy, and who may be described as the sun of the

planetary system of living philosophers, Dr. Dalton. His theory of the combination of elementary substances in definite proportions has not only effected a revolution in the science, whose appellation has become synonymous with his name; but has manifestly accomplished the most wonderful change in the economy of all processes, where chemical agents are employed. Previously to the promulgation of his "Chemical Philosophy," these agents were employed without any other regard than to the production of certain effects in particular processes. Quantity was used without any consideration to the respective proportions of the ingredients; incalculable waste resulted, immense expense was entailed by the artizan, and the high prices of the products were the only means of remuneration. Since, however, Dalton's doctrines have been accepted, since they have been universally applied to all processes of a chemical nature, *the nicest economy prevails.* As now it is known in what *precise proportions* the natural elements combine, the mixture of artificial compounds, or simple ingredients, is so accurately regulated, that no unnecessary preponderance of one or other agent is observable; no superabundance of materials consumed; no waste of even the most useless material to be detected. The manufacturer conducts his processes with less risk to himself; a proportionably less amount of capital is necessary for the support of his works; and he is thereby enabled to present to the consumer the produce of his art at a considerably reduced rate, yet with a greater profit to himself. Such is a direct effect of the application of Dr. Dalton's theory of definite proportions to the practice of our manufactures. Again, we might example the use of the coal gas for illumination. This was, on its first introduction, contemplated as a gratifying instance of the advantage accruing to a nation cultivating science for its intrinsic value. Now, however, we regard its application to our domestic use, as almost of secondary importance compared to the other objects of utility and profit which are afforded during its formation. The products, resulting from the combustion of coal *for the purpose of disengaging the inflammable gas*, have been found to be as susceptible of useful employment, and are nearly as extensively used, as well as proved well-nigh as profitable, as the gas for which the process was originated. Another striking instance of the benefits conferred by Chemistry on our arts is afforded by the sugar-worker and refiner. Though we still seek from foreign soils the principal part of the sugar consumed in this country, Chemistry has proved to us that we may be as abundantly supplied by the vegetables of our own climate with this substance, as would meet the demand for it in Great Britain. France has, indeed, now taken advantage of this information, and presents finer specimens of sugar derived from the growth of her own soil, than can be afforded by the wealthiest planters.

These are a few instances of the improvements effected in different processes, with which we are all familiar, by the application of chemical knowledge. If we desire examples of the stores of wonders which Chemistry developes—if we desire to see in what manner the laws of Chemistry may still be made to yield profit to the speculator,

and admiration to the enquirer—we need but to look at some of the transformations which are effected by the exercise of chemical force, by which the most apparently useless materials may be converted into objects of importance and value in the arts, and may ultimately become sources of wealth and convenience, such as former ages could never suspect to have existed, and which now, to be properly appreciated, can only be regarded as the munificent gifts of pure science to man. Who, in bygone times, would have conceived that *linen rags* were capable of yielding more than their *own weight of sugar*, and this by the simple agency of one of the cheapest and most abundant acids! Who, in such days, would have supposed that *dry bones* could be a magazine of nutriment, capable of preservation for years, and ready to yield up their sustenance in the form best adapted to the support of life, on the mere application of steam, or of an acid at once cheap and durable! Who, ignorant of the secrets which chemical science unfolds, could credit the assertion that wood, that mere sawdust itself, is susceptible of conversion into a substance bearing no remote analogy to bread; and though certainly not so palatable as bread made from flour, is, nevertheless, no way disagreeable, while it is at once both wholesome and disgestible, as well as highly nutritive. This fact, discovered by Autenreith, of Tubingen, is of an importance which entitles it to greater celebrity than it has hitherto obtained; as, by its possession, famine herself might even be defied.

I have here brought under your view examples of the powers which mechanical art may derive from nature, as developed and exposed by philosophy; and of the means these may be rendered of augmenting our national power, of extending our commercial associations, and of diffusing over the whole globe the products of our industry. I have exemplified some of those forces that may still be made subservient to similar purposes: I have also stated to you some of the dependencies of art on the cultivation of science, whence you may infer the miracles which their combination can accomplish, and the benefits which, by judicious use, it must realize. There is not a corner of the earth whither commerce has extended her influence and established her spirit, but can testify to the truth of the mutual advantage resulting from the stricter union that is every day taking place between the powers of scientific knowledge and the practical prosecution of the arts. This truth, so widely and so universally as it is disseminated, has principally emanated from our own island. England can not only boast of having diffused this knowledge, but has likewise the grateful satisfaction of proving, that it is in her manufactures particularly, where the beneficial effect of this happy association is daily manifested. It surely, then, behoves every Englishman of liberal and enlightened education, to make himself acquainted with the sources of the wealth of "his own, his native land," to inform himself in those departments of philosophy, which are of such vast importance, such avowed utility, and such incalculable value to mankind in its present state of civilized existence. Hence then, as non-professionals, you have an especial interest in the acquisition of scientific information. Hence

also, as a mere means of gratifying your curiosity on questions relative to the character of the arts and manufactures of your country. There remains yet, another reason for your attempting the possession of this knowledge; a reason that must be felt by all, and, if appreciated, must constrain a more general prosecution of philosophical study, I mean the beneficial effect such study produces on the mind and the character of the individual indulging in it. By such occupation the mind is habituated to investigate facts, is taught to examine them singly and in conjunction, is brought to regard phenomena, and to seek their causes, and to establish the connection of effects and causes; thence to deduce those principles from those combinations, we acquire the laws of nature. Such occupation is one which, above all others, tends most to engage the intellectual faculties in that exercise, which will exclude all individual feelings, shut out all selfishness, and dispose them to seek gratification only in the prosecution of truth, and satisfaction in the attainment of a knowledge of its immutability. This habit of seeking the truths of nature in our attempts to become acquainted with her laws, must exert a beneficial influence over both the moral and social character of man. The observations such pursuits enable us to make of the calm, energetic regularity of nature, the immense scale of her operations, and the certainty with which her ends are attained, must tend irresistibly to tranquillize and re-assure the mind, and render it less accessible to repining, selfish, and turbulent emotions. This it does, not by debasing human nature into weak compliances, and abject submission to circumstances, but by filling the mind, as from some inward source, with a sense of nobility and power, which at once stamps the possessor with superiority, by showing the innate strength and dignity of the human mind, and by calling into action those powers and faculties by which we are enabled to comprehend and appreciate the laws upon which the harmony of our universe depends. Still higher feelings are excited as our pursuits advance. As we have progressively developed before our understandings the consistency which pervades all nature, the regularity which governs all her operations, the vastness of her laboratory, and the boundlessness of the space into which her laws are extended, the mind is cast back on itself with sincere humility to acknowledge the supremacy of that First Cause, which originated, continues, and may annihilate these subjects of our wonder and admiration.

Gentlemen,—the importance of the study of physical and chemical science as a constituent portion of polite education, the beneficial influence it exercises over the moral feelings, the social character, the happy tone it gives to the intellectual faculties by constantly keeping them in a state of pleasurable excitement,—the impression it stamps on the mind, leading it to comprehend the stupendous operation, the harmonious regularity, the infinity of processes, the illimitable power of nature; and so preparing it to receive the principles of true and simple religion, as evidenced in the works of creation, and to appreciate the truths of revealed religion, are considerations that ought to constrain for it the dedica-

tion of your most serious attention. The activity of your future career—the engrossing nature of professional occupations—may be pleaded as reasons for not yielding that application to these subjects, which they may require. Such pleas may be apologies or excuses, but they certainly cannot be accepted as rational justifications of the neglect. The busiest occupations and philosophical pursuits are by no means incompatible. The bustle, the competition, the self-interest, the jarring feelings, the morbid excitement, incidental to professional practice and every-day life, may find a pleasing relaxation in the placidity, afforded by the change of these occupations for the study of philosophy, enjoyed in the intervals of the most active vocations; the calm and dispassionate interest with which it fills the mind renders it a most delightful retreat from the agitations and discussions of the world, as well as from the conflict of passions, prejudices, and interests, in which the practitioner finds himself too frequently involved. Nor is it one of the meanest advantages afforded by such pursuits, which, however, they present in common with every class of intellectual pleasures, that they are altogether independent of external circumstances, and may be enjoyed in every situation in life in which man can be placed. The most elevated in society find how pre-eminently superior such pursuits are to any pleasures of sense, in the unlimited increase of continual repetition with which they may be indulged without the danger of satiety or distate. The mind that has once imbibed a taste for scientific enquiry, and has acquired the habit of applying its principles readily to the cases which may come under its observation, has within itself an inexhaustible fund of pure, exciting, and ennobling contemplations. Accustomed to trace the operation of general causes and the exemplifications of general laws in circumstances, where the uninformed and uninquiring eye perceives neither novelty nor beauty, the natural philosopher walks in the midst of wonders. Every object which falls in his way elucidates some principle, affords some instruction, and impresses him with a sense of universal harmony and order. Nor, is it a mere passive pleasure, that is thus communicated; a thousand questions are continually arising in his mind, a thousand subjects of enquiry presenting themselves, whereby his faculties are kept in constant exercise, and his thoughts perpetually on the wing, so that lassitude is excluded from his life, and that craving after artificial excitement and dissipation of mind, which leads so many into frivolous, unworthy, and destructive pursuits, is altogether eradicated from his bosom.

If the reasons, hitherto given for the purpose of inducing you to embody the departments of philosophy in your general education, be received by judgments sympathizing with the sincerity of the conviction with which they are given, and thereby directly gain them that confident adoption, which would lead you to the study of the natural sciences, I have still to detail other powerful arguments, confirmatory of the propriety of such a course, and more especially of your introducing this study into your general system of professional education.

PRACTICAL APPLICATION OF THE FACTS DETAILED RESPECTING THE WONDERFUL STRUCTURE OF THE SPINAL COLUMN.

To the Editor of the Anthropological Magazine.

Dear Sir,—I have read in the September number of your valuable periodical, a paper, headed "On Spinal Complaints;" in which a comparison is instituted between the treatment of spinal complaints adopted by me, and that adopted by other medical men. The subject is of uncommon interest, both to the faculty and to their patients. I have long entertained an opinion, *that spinal complaints not only constitute a large portion of our ailments; but, that, by the connexion of the spinal column with the nerves, the viscera, the muscles, and tubular structures, modifications of this column produce some diseases and influence many others, either increasing their severity, or making them irremediable, until the spinal column has been corrected: thus developing a formidable amount of human misery. Indeed, I am convinced that many obscure and intractable disorders, hitherto referred to other causes, originate in the spinal pillar.* I have been irresistibly drawn to this conclusion, not by speculative notions, but by reiterated experience. Several obscure cases, which had baffled the skill, and resisted the united efforts of the faculty, for *ten, and even twenty, years*, have come under my professional management, and have been cured by treating them as connected with the vertebral column. Candour and the love of truth oblige me to aver openly, and without reservation, that hitherto the diseased conditions of the spine, and their investigation, have generally been conducted upon erroneous principles. Under a mistaken idea, that deformities, however produced, are irremediable, no adequate attempts were made to overcome them. Hence, although the faculty could not fail to perceive, that a vast number of ailments and anomalous symptoms were called into existence, along with these calamities, they did not discover, or even suspect, their real origin. But, on the mis-shapen spine being forced to submit to the means employed, and to which means I discovered the way, it was at length ascertained, that the manifestations and the deformities kept pace with each other. As the one receded, the other became less violent, and when the deformity was removed, the symptoms entirely disappeared: a convincing proof, that the two maladies have a common origin, and that, in order to get rid of the latter, we must eradicate the former. This is the course to be pursued; indeed the only one available in these distressing circumstances. In future communications, I shall detail some of these cures, and in order to prevent disbelief or even suspicion, will, as heretofore, disclose names, or adduce satisfactory references.

In the two last numbers, you have given a short and lucid anatomical description of the spinal pillar, quite sufficient, as far as it extends, for my present purpose. I propose to follow the same

with an account of the *vertebral articulations;* and then to point out by what derangements in them the different species of spinal disease are produced. This course is quite indispensable to my plan; because, *as all my indications and reasonings are based upon anatomy*, a knowledge of it must precede the details.

You have shown, in your anatomical description of the spinal column, that it consists of many parts, curiously fitted to each other; and that it is, moreover, a very complicated organ. Although no single portion admits of great flexion, yet the whole pillar is capable of considerable motion in almost every direction. These varied motions I shall proceed to describe; then explain how the diseases are generated; and conclude with some practical deductions, referring to the cure of distortions, and of the diseases emanating from them.

OF VERTEBRAL ARTICULATIONS.

Before noticing these articulations it may be advisable to state, that most medical practitioners have hitherto considered, that spinal deformities are connected with *caries* or rottenness of the spine: and having adopted this view, have tortured the unfortunate patients with caustic, moxas, and other irritating applications, with the view of arresting this caries.

My views are quite the opposite; and, consequently, if established, the sufferings of the deformed must necessarily be lessened, as medical men will substitute a milder and more efficacious mode of treatment for the cruel one just referred to.

An articulation is the assemblage of two or more bones, and their manner of union, whatever it may be.

Articulations are divided into two great classes, the *immoveable* and the *moveable*. The latter have received various appellations, according to the nature of the motion they are fitted to perform. The motions of the spine being very complex, a great diversity of joints is required. Some detail is necessary, in order to explain the superiority of the mode of treatment I have adopted.

Moveable articulations, called *diarthrodial*, have their mobility rendered effectual by various contrivances.

The first is when the *articulating surfaces* of the joint are united together *by an intermediate cartilaginous* (gristly) *substance*. It is in this way that the *bodies* of the vertebræ (or bones) of the spine are united together. In technical language this is called *amphi-arthrosis;* the Greek word for joint being $\alpha\xi\theta\rho o\nu$, arthron, and $\alpha\mu\phi\omega$, both.

The second is when the articulating surfaces *touch or come into close contact*. Some are so constructed that they admit of motion in every direction, and being generally made round like an *orb*, such joits are called *orbicular*. Sometimes the head of one bone is received deep into the cavity of another, such as the round head of the thigh into the deep socket of the bone of the pelvis or hip: such articulation is called *enarthrodial*. Sometimes the articulation of this kind is more superficial, as in the articulation of the inferior jaw with the superior jaw. This is called *diarthrodial*,

and is an articulation that prevails in the spine, between the oblique processes of the vertebræ.

Another modification of this articulation is, when motion is admitted only in two opposite directions; the joint, produced by such an articulation, is called the *hinge*, or ginglymode joint, from *ginglymus*, a hinge. Of this motion there are two kinds, *angular* and *lateral:* in the former the only motions being *flexion* and *extension*, then the articulation is deemed perfect: when, as in the knee, other slight motions are possible, the articulation is deemed imperfect.

The lateral hinge-like joint allows of one motion only, that of *rotation*. If the rotation takes place in two parts of the length of the bone, it is called *double:* if the rotation is confined to a single point, the movement is called *simple*. Of this latter kind is the articulation of the atlas, (the first vertebra,) with the tooth-like process of the second vertebra.

Such are some of the general articulations.

These remarks form a proper introduction to the *articulations of the vertebral column* in particular.

The spinal pillar, composed of a great number of separate bones, which are joined together at many points of their surface, necessarily displays a variety of articulations.

Of these some are common to all the vertebræ. Others are peculiar to certain vertebræ, and occasion, from the different shapes of the bones, important differences in the number and the disposition of the connecting ligaments. Those which are common to the whole vertebral column may be first noticed. The vertebræ are united with each other, 1st. by their *bodies;* 2nd. by their articulating *processes*, called technically apophyses; 3rd. by their *plates;* 4th. by their *transverse spinous* processes. The means of union are, in some, *peculiar to each vertebra*. This limitation applies especially to the intervertebral substance, the yellow ligaments, and the inter-spinal ligaments. Others again extend to the *whole vertebral column*. These are the *anterior* and *posterior vertebral* ligaments, and the *super-spinal* ligament.

1st. The articulation of the bodies of the vertebræ.

The anterior vertebral ligament covers the bodies of the vertebræ in front, from the dentata to the top of the sacrum, under the form of a long fibrous band, of a flat, glistening, and pearly aspect. It is thin in the neck, broader and thicker in the back and loins. In the latter it is fortified with sprigs from the diaphragm. The anterior surface is concealed by the deep seated organs of the neck, chest, and abdomen. The posterior surface is fastened to the bodies of the vertebræ, and their articulating cartilages, by strong adhesions. On the sides, neck, and middle of each vertebra, we find an oblique fibrous emanation, which extends only from the superior to the next below. The fibres of the anterior vertebral ligament are long: they leave small interstices for the passage of vessels; some of the fibres are superficial and long, others deep seated and shorter. This ligament, placed before the bodies of the vertebræ, serves to limit the extent of flexion in the vertebral pillar.

The posterior vertebral ligament is placed opposite to the former, and immediately behind the bodies of the vertebræ. It also proceeds from the second cervical, (at the middle of which it is confounded with the ligament extending from the back of the head to the odontoid process, called the *occipitodentoid* ligament,) all the way to the sacrum, where it terminates insensibly. It is formed of a long band, narrower in the back than the neck or loins, and, as it were, contracted more in one place than another, because the thin fibrous ribbon of which it consists, is drawn nearer together at the level part of every vertebra, and is expanded behind each fibro-cartilage. It is of a close texture: the posterior surface is polished, pearly, and has a tendinous expansion. It is formed to the vertebral canal, and the investing membrane: the anterior surface adheres to the bodies of the vertebræ, and more firmly to the fibro-cartilages. This ligament is composed of longitudinal fibres: the deeper seated are shorter; the superficial, longer. It confines the bodies of the vertebræ behind, and assists in restraining the motions of the vertebral column.

The intervertebral fibro-cartilages. They are *cushions*, pliable and elastic, placed between the bodies of each vertebra, from the second cervical to the last lumbar. Their form corresponds, in every region, with the bodies of the vertebræ, between which they are situated. They gradually diminish in thickness from the cervical, where they are thin, to the lumbar region, where they are very thick. In the neck and loins they are thicker in front than behind. In the back it is the contrary. The beauty of this provision must be apparent when the nature of the back is considered. They adhere very strongly to the vertebræ above and below them. Their circumference is fashioned in front to the shape of the anterior vertebral ligament, and backward to the posterior. They are formed into small cavities in the back, to receive the heads of the ribs. These cartilages consist, in the outline, of strong ligamentary fibres, which, converging towards the centre, are obliquely intersected with one another. The fibres, fewer behind than before, leave between them larger and larger spaces, as they approach towards the centre. These spaces enclose a substance soft, pulpy, viscid, and of the same uniform consistence. On being cut horizontally, and placed in water, they imbibe the liquid, swell, and assume a conical form. The suppleness and the elasticity of the spinal column are owing to the fibro-cartilages.

2nd. Articulation of the oblique processes.

The form and the direction of the *small roundish surfaces* of these articulating processes, have already been described. They are lined with a very thin cartilaginous substance, inclosing a minute bag, containing synovia, a liquid for the purpose of lubrication, the same as oil to a hinge. This cartilaginous substance is reflected from one process to the other.

3rd. Articulation of the vertebral plates.

The yellow ligaments fill up all the spaces between the vertebral plates, from the second and third of the neck to the head of the sacrum. They are narrow and thin at the neck, becoming larger

and larger in descending. Every separate ligament is divided into two quadrilateral portions. The right and left are *joined angularly behind*, to the level base of the spinous processes. Their superior border is attached to the internal surface of the vertebral plate situated above. The inferior is fixed in the same way to the plate below; thus connecting the two vertebræ most firmly together; these portions having their strength augmented by the angular joining, referred to, behind. They seem to be continuous behind, and to mix intimately with the interspinous ligaments. They are formed of an elastic, strong, and unyielding tissue; the colour is decidedly yellow, and the fibres are perpendicularly disposed. These ligaments complete and fill up all the spaces between the vertebræ in the posterior division of the canal. They oppose the too great flexion of the spine, and, by their elasticity, assist in replacing it after being bent.

4th. Articulation of the transverse spinous processes. This articulation is secured by two sets of ligaments.

1st. *The inter-spinous ligaments*, which fill up all the spaces between the transverse spinous processes of the back and loins. In the neck their place is occupied by muscles; because so many motions are required in that part, to which motions muscular fibres are essential. They consist of small fibrous membranes which take the form of the spaces where they are lodged. They are narrow and triangular in the back; larger and quadrilateral in the loins; becoming thicker and stronger as they descend. Their superior edge is fitted to the whole inferior extent of the upper transverse process, and the inferior to the superior spinous process below. Backward they run into, and are confounded with, the superspinous ligament. They consist of irregular fibres, which pass obliquely from one transverse spinous process to the other. They support the vertebræ behind, and resist the too great bending of the spinal pillar.

2nd. *The superspinous ligament.* It is situated upon the tops of the transverse spinous processes of the dorsal and lumbar vertebræ, from the seventh cervical to the middle prominences of the sacrum. It is thinner at the back than in the loins, where it is thickest. These fibres take a longitudinal direction. The superficial are longer; the deeper seated, shorter. Backward they communicate with the skin: forward they are fixed to the summits of the spinous processes, and in the spaces between them, they are mixed with the interspinous ligaments. This ligament confines the vertebræ backward, and restrains the movements of the vertebral column.

I am, dear Sir, very truly your's,

EDWARD HARRISON.

Holles Street, Oct. 12, 1836.

(To be continued.)

CHALMERS'S SOUL'S PROGRESS INTO NARROWNESS.

The splendid, the christian, the noble-minded speech of Dr. Chalmers, in reference to Catholic emancipation, delivered in Edinburgh, (p. 258, 259, 260, 261, 1st volume *Christian Physician*,) must have awakened the most exalted sympathies of the human being. It was proposed to point out the strange, the lamentable change, which has come over the mind of that exalted individual: a change, unfortunately, for the worse: and which change for the worse is, it is still more unfortunate, associated with the transfer of Dr. Chalmers into a sphere, in which an opportunity will be given to the prejudiced, and even perhaps to the unprejudiced, of imagining that such change is to be ascribed to motives, peculiarly worldly.

Various have been the opportunities which Dr. Chalmers has shown, that that mind, which, once, appeared to embrace the wideness of Christian charity, is now contracted to the narrowness of sectarian hate.

The only exhibition to be noticed on the present occasion, is that which occurred in the discussion at the Presbytery of Edinburgh, on the Universities (Scotch) Bill, then passing through parliament, but which has since been laid aside.

One of the clauses in this Bill was, that the visitors should have the power of abolishing in the universities certain professorships, if not necessary. This occasioned many objections to be raised against the Bill. Dr. Lee remarked, that the crown has at present the power to divert, and that even endowments affixed to particular chairs (one of which was by the Roman Catholics to impede the spread of the reformation,) had been diverted to other objects by parliament; and, that, even should the visitors abolish the *theological* professorships, "the church would still stand on its own ground, and appoint professors to teach her students, though the endowments to those chairs were removed."

Dr. Chalmers opposed Dr. Lee's reasoning, and said, "That with regard to Dr. Lee's argument, that the church would support the theological classes, though their endowments were taken away, his objection to that was, that it SAVOURED TOO MUCH OF THE VOLUNTARY PRINCIPLE."—*Scotsman*, *July 6th*, 1836.

Now, contrast this sentiment with the sentiments in his splendid speech. Was it not the beauty of that speech that it depicted the intrinsic force, the vanquishing power, the irresistible influence, the genial effects of the *voluntary* principle: and that all the power of the involuntary principle could not make one convert, could not overcome error, could not overthrow one prejudice. It may be well to extract a few of the sentiments; to record them once more against him; in the hope that they may awaken him to a sense of shame; to a feeling of repentance; to a return to the good old paths in which he once professed to walk.

"The truth is, that these disabilities, (catholic) have hung as a dead weight around the protestant cause for more than a century. They have enlisted in opposition to it, some of the most uncon-

querable principles of nature: resentment because of injury, and the pride of adherents to a suffering cause."

"But if to strengthen the cause of truth you put the forces of the statute book under her command, there instantly starts up on the side of falsehood, an auxiliary far more formidable."

"When I speak of force, it is the combined force of truth and charity (what is this but the voluntary principle?—Ed.) that I mean; and it is precisely because I believe it to be omnipotent, that I am an emancipationist."

"What other instruments do we read of in the New Testament for the defence and propagation of the faith, but the Word of God and the Spirit of God?" (We then, Dr. Chalmers, do not read of an annuity tax.) "How does the apostle explain the principle of its triumphs in that age, when truth was so mighty in the pulling down of strong holds? It was because the weapons of his warfare were not carnal." (The incarceration of Wm. Tait and Councellor Russell, and the fining of others, is a spiritual weapon, Dr. Chalmers must argue.)

"The kingdom of God, which is not of this world, refuses to be indebted for its advancement to any other reason; and scripture and prayer," (that is, the voluntary principle in operation,) "these compose, or ought to compose, the whole armoury of protestantism; and it is *by these alone* that the battles of the faith can be successfully fought."

The arguer did not know the force of his own argument; he did not know the extent of the operation of the very principle for which he was arguing. He knew not the full force of that precept, or, rather, truth, "my kingdom is not of this world." He liked the relief of Catholic Dissenters in Ireland; he loves not the relief of Scotch Dissenters in Scotland. He loved not the vestry cess in Ireland, but he does not hate the annuity tax in Edinburgh. He admires christian freedom in theory; he loves sectarian despotism in practice. How are the mighty fallen.

To show still more fully that the above sentiments were the matured thoughts of Dr. Chalmers's deliberate reflection, the following extract from a speech delivered before the General Assembly, on the repeal of the Test and Corporation Acts, so far as regards the sacramental test, will be additional evidence:—"Experience has palpably shown that the Scottish establishment needed none of those securities which her fearful sister of England considered, at one time, necessary to *prop up* her *frail and precarious existence*. While he was walking through the streets, he observed large *wooden* props resting obliquely against the walls of some of the houses: when he saw this, it seemed to him irresistibly implied that these were the CRAZIEST edifices in the street. So he thought it had been with the fabric of the English church, which incurred the whole *disgrace of these unseemly props*, and which had increased her strength in taking them down. Her only blunder was, that to please the fancy of certain devotees, long accustomed to these props, and whose taste would have been offended by the want of them, they had erected in their place buttresses of mere gingerbread and stucco, in the form of a Declaration."—*Edinburgh Courant, May* 26, 1828.

A PHRENOLOGICAL ACCOUNT OF JAMES C. B. HAWKINS.

Continued from page 92.

In looking *phrenologically* at the head of this precocious boy, it will be seen that the moral, intellectual, and animal regions are all largely developed. The temperament was decidedly sanguine, with a slight dash of the bilious.

I commence with the central organ of the moral region, as being, by its altitude, known to be pre-eminent in dignity; and then I descend to the inferior organs.

Veneration is very large, and no point in the child's character was more striking than his adoration of the Supreme Being: his ardent affection for his supposed parents, and desire to obey them: his enthusiastic admiration of antiquity, and of the sublime in nature: and, indeed, love of the superior, in every thing.

Benevolence is also very large; and goodwill to all was a distinguishing trait in his character.

Firmness, too, is very large; and I never knew a child more persevering in his endeavours to obtain his objects.

Hope, being large, came in aid of his perseverance, and, combined with his sanguine temperament, led him to view obstacles to his plans with perfect contempt, and occasioned him to overcome difficulties from which a less favoured organization would have shrunk.

Imitation, large, enabled him to copy well whatever he understood, and wished to imitate.

Marvellousness, supernaturality, or wonder, large; was strikingly exemplified in a preference for every thing of a spiritual nature, and in an indefatigable curiosity to explore the wonders of nature and art.

Justice, or conscientiousness, large; the operation of this faculty was particularly seen in his shunning the company of the boy who had induced him, once, to disobey his parent. The love of what is right, was conspicuous in all his little transactions, and I never saw a more disinterested child.

Ideality, very large; the grand battle of his animals and his early attempts at versification evinced the influence of this feeling, which, combined with marvellousness, no doubt induced the episode of the fox's ghost, before mentioned.

Of his intellectual organs the superior ridge is very large.

Comparison, very large; was amply confirmed by his accuracy in noting the resemblances of things, and his often perceiving analogies that escaped the notice of the common observer.

Causality, very large; almost as soon as he could speak, he began to enquire why things were so and so, and as he grew up would look into one science for the illustration of points in a different science. On one occasion, when only five or six years of age, while I was explaining to him the nature of chemical attraction, he

exclaimed, "well! now I can understand how it is that the planets are kept in their proper places by means of the attraction of gravitation."

Wit, very large. This I take the liberty of denominating the organ of *conclusion* or *result*, for it manifestly belongs to the family of the superior intellectual stratum, and is the termination of the ascending scale through which all investigations naturally proceed.

We first look at a thing as an individual, distinct from all other things and judge of it by the organ of *individuality*. We next take cognizance of its qualities, by the organs of *form*, *size*, *weight*, *colour*, *order*, and *number*. As yet it is considered merely as an inert thing, and we have travelled only through the lower stratum or story of the perceptive organs. To view the operations of the thing, we must mount up into the second story, and there, by *eventuality*, we examine the actions of the things; and by *locality*, *time*, and *harmony*, observe *where*, *when*, and *how* these actions are performed.

In order to proceed in the investigation, we must ascend into the upper story of the intellectual region, and, by the organ of *comparison*, judge of the thing compared with its actions, and thus learn the fitness and the propriety of the same for its purposes; and by the organ of *causality*, we enquire the why and the wherefore.

After all this process of enquiry, we naturally come to the use of it, namely, *conclusion* or *result*, and this seems so totally different from the preceding, that it must require a separate organ. Now the only remaining organ of the forehead is that called *wit* or *gaiety*, and its situation implies that its operation succeeds *causality*. Hence, I imagine that this is the organ of *conclusion* or *result;* and, at the same time, it is the organ of gaiety, as a consequence of *conclusion*, since it is natural to rejoice at having finished any labour. Thus, the farmer makes a feast called harvest home, when he has finished the labour of gathering in his crops; and joy and gaiety is the universal successor to the conclusion of every piece of work. Instances might be multiplied without number, such as the feast, on putting in of the keystone of the arch of a bridge; the shouting, on laying the top stone or brick of a building; the rejoicing, on launching a ship again, on masting, on rigging, &c.

Wit is an inferior use of the faculty of conclusion; the witty person generally jumping to a conclusion without ascending to it by the regular steps of investigation; and, therefore, the thing appears ludicrous.

The child, whose development we are now considering, was remarkable for his sound conclusions, and, at the same time, for his gaiety and love of pointed witticisms.

Eventuality, large; gave him facility in examining and recollecting facts.

Locality, *Time*, and *Harmony*, moderate; there was nothing remarkable in the character in reference to these faculties.

Individuality, very large; gave him great power in distinguishing persons and things.

Form, *Size*, and *Weight*, very large; aided by imitation and constructiveness, combined to give him the immense power which he possessed of fashioning and adapting his means to his end.

Colour, full; he painted his helmets, caps, and scabbards, with a tolerably good imitation of the costumes intended to be represented.

Order, large; he had great pleasure in making arrangements, and generally knew where to find any article among the great number of his playthings and tools, yet they were sometimes in confusion.

Number, large; he possessed considerable facility in calculation, and went through the four rules of arithmetic, with a thorough understanding of them, on an application of only two or three half hours in the week, during three or four months; and had made some progress in decimal-fractions.

Language, large; in the cast, which was taken three days after death, the eyes are sunk deeply in the head: but when in health they were very prominent, as may be seen by the lithographed likeness, given with the last number. The great ease with which he learned languages confirmed this development.

The organs of the animal regions are all largely developed.

Self-Esteem is large; but, under the control of the moral feelings, manifested itself in a dignified modesty of manner, which was particularly noticed by all that knew him. He was never obtrusive, nor was he diffident.

The Love of Approbation is very large; but, under the same powerful control, assumed the form of the pleasure of pleasing, and gave a peculiarly fascinating address, that won the favor of every one, without seeming to ask it.

Cautiousness, large; this faculty was conspicuous in the child from the earliest time; he scarcely ever broke a glass, or a piece of crockery, and he had a nice tact in handling delicate articles, and habitually avoided dangerous places and things.

Secretiveness, very large, was manifested in his not developing the plot of his intended battle for three months; but the abuse of this faculty, namely, deception, never appeared. He was, on the contrary, most ingenuous.

Acquisitiveness, large; this faculty operated as a love of accumulating objects of interest for the purpose of learning; and was never seen to assume the form of the love of money, or of any thing as mere property.

Inhabitiveness, very large; the operation was seen in the passion for ascending high mountains; and he talked much about home, when abroad.

Attachment, very large; the attachment, which he manifested for his supposed parents, was never exceeded by any child for real ones.

Combativeness, moderate; he never showed any disposition to fight, yet he would contend for his point with firmness, but not with rudeness.

Destructiveness, large; under the control of the moral feelings, this appeared only as energy, except in one instance, when he cut the leather bottoms of some chairs, without being able to assign any motive for the destructive operation.

Gustativeness, large; he was very moderate in the quantity of his food, but distinguished flavours and odours with peculiar nicety; and possessed a great aversion to offensive odours.

The love of young, very large; he was always delighted with the company of helpless infants. When only three years old, on an infant in arms being brought by a visitor, he has begged of his mamma to keep it always. At seven years old he evinced much pleasure in opportunities of instructing young children. The last three lines of his love-letter show the powerful operation of this feeling.

Amativeness, very large; as appears from the cast of the interior of the skull, it is very large for a child of his years; but it has greater proportional altitude than latitude, and is situated considerably forward in the brain; hence, in the cast of the head, it appears but moderately developed.

I suggested at page 281 of vol. I of *The Anthropological Magazine*, that every organ of the brain, when situated high, or having high dimensions, possesses an elevating or a moral disposition; when forward, it indicates an intellectual bias, and when lateral, backwards, or downwards, it has an animal inclination. Upon this principle it may be inferred that the amativeness of this boy was of a moral and intellectual character, and not at all animal; and I would explain moral amativeness to be the love of goodness in the sex; intellectual amativeness, the love of intelligence in the sex; and animal amativeness, the sensual love of the sex.

This explanation accords with the disposition of the child, who was remarkable for his fondness for benevolent and intelligent females, but never exhibited the least symptoms of animal sexual propensity.

Constructiveness, very large; he could readily learn to execute almost any thing he desired, with moderate application. Manufacturing was with him a passion, and it was painful to him to be idle.

Although his animal organs were so large, they acted in subservience to the moral feelings; and, therefore, added beneficially to the character.

The weight of the brain immediately on being taken out of the skull, and the dura mater removed, was two pounds and a half medicinal weight of Munich.

The physicians said that it was about the usual weight of a full-grown man's brain. I am not aware of the proportion between the English and Bavarian weights.

On comparing the cast of a full-grown brain in the Society's collections, No. 261, it will be seen that the child's brain must have been rather the larger of the two.

The three casts now presented to the Society, namely the cast from the inside, and that from the outside of the skull, and the cast of the head, form together a useful series for the student of Phrenology, to compare one with the other.

[In the next number, Mr. Hawkins's remarks upon a note of the Editor of *The Phrenological Journal*, relative to this child, will be published.]

THE CURSE OF WAR. OBEDIENCE AND HAPPINESS—DISOBEDIENCE AND MISERY.

Man's improvement can be obtained only by obedience to the laws of the Creator. One law is, that the organs of the moral feelings are placed in the highest regions of the head; and, therefore, the only means by which man can be raised, is by appeals to those moral feelings: is by educating them.

Is the sword? Is the pistol? Is the carbine? Is the cannon? Is the bomb? Is the rocket such a means? The following Essay will give the answer.

WAR—SPAIN, POLAND, &c.

We have read with much pain of the sufferings of the men who were induced to hire themselves to the work of slaughter in Spain; yet though our feelings lead us to pity the poor men, our judgment leads us to condemn wholly and entirely any armed interference with the affairs of another nation, and to hope that all who resort to the sword, in offensive war, may perish by the sword.

It is a maxim frequently quoted by political writers, that, for a nation to be free, it is sufficient that she wills it. This maxim is true, and involves the negation of foreign interference. A nation must love liberty with that oneness of mind, which is sufficient to produce unity of conviction, and action, before she can will it; and the love of liberty, can only be produced by that knowledge of the necessity of government which associates with it the idea of order, and the modes of collecting, and the duty of obeying, the will of the majority, when each has had the opportunity of expressing his assent personally or by his representative.

There are few who do not now admit that the resistance of the Americans, and their declaration of independence, were just and holy, because there are few who do not now allow, that taxation without representation is tyranny. It follows that resistance now would be as justifiable in theory to every unrepresented man, though not so prudent or so imperiously necessary, as it then was to the Americans: their success did not sanctify the principle, it only sustained their assertion of it. Until a nation has arrived at the state in which liberty is loved because it is understood, it is useless to expect that freedom can be established. It is the result and the reward of moral intelligence and of moral efforts.

Freedom is the absence of restraint; civil freedom, or social liberty, is the not being restrained by any law but what conduces, in a greater degree, to the public welfare. To love social liberty, it is necessary that it should be understood: it is absurd to expect that it can be established where knowledge and the kindly affections, which flow from the love of order, are not. To understand the nature of social liberty, we must understand the duty of self-restraint.

It is strong evidence of the greatly increased understanding and moral strength of the people of Great Britain, that, much as their perceptions of the value and their consequent love of freedom

have increased, their knowledge of the means by which it is promoted, has also increased; that, whilst their affections have enlarged, their judgment has been strengthened: they have seen the inutility of offensive war to promote liberty in another nation, or of domestic violence to support domestic freedom—hence though their hearts have responded to the appeals made against the atrocious conduct of the tyrants of Russia, Austria, and Prussia, towards Poland, those who have sought to rouse them to war on the subject, have not been able to make a party, or to produce any general inclination, in favor of that means of advancing the interests of humanity. Theirs is not now a blind zeal—they look at the state in which the *people* of Poland were under the power which it is proposed to reinstate—they have perceived that the wars England has been induced to wage *against* tyrants have been *for* tyrants, and that it is adding to the world's evils to shed the blood of one nation under the notion of advancing the civilization, the liberty, and moral improvement of another. Englishmen now look for something more than a mere phrase or catch word; and, however ardently and affectionately they may desire the spread of liberty, they know that knowledge must precede it, that commerce must open the way: that the arts of peace, and not the art of war, must work all moral revolutions—that those who propose the sword of the foreigner as the harbinger of freedom, must be tyrants in heart or weak in the head, and that such efforts could only end in establishing tyranny—that domestic improvement cannot be advanced by foreign interference—that the wants and the sympathies of a people cannot be understood by those who are not of them, and, particularly, cannot be understood by a people of a strange tongue. Those wants and sympathies are created, moved, influenced, and affected by climate, temperament, national feelings, prejudices, and innumerable circumstances, by which foreigners are not, and cannot be, affected, and which they cannot appreciate. For men to enrol themselves in such a cause is, to lend so much blind force for a purpose which must end in checking, not in promoting, peace and liberty.

Foreigners cannot fully, they therefore will not be able rightly to understand the cause; hence they are no better than so much human machinery, used as a brute force to set up or perpetuate tyranny. It is with nations as with individuals; the only way in which lookers on can usefully interfere in a quarrel, is to offer mediation and counsel peace; if individuals, in such a case, join in the strife, they increase a broil into a riot; as nations, by their interference, increase a partial into general bloodshed and slaughter.

An armed interference of one nation with the affairs of another has never been productive of any other result than the increase of human destruction; and, that, whether it has been under the plea of sympathy and friendship, or of the quixotic notion of extending liberty by foreign aid.

Commerce has been the great teacher, its pursuits are peaceful; its results, blessings. It conveys the gifts of God to his creatures by their own agency; it gives to each that which is desirable, and

it is an exchange by which both are benefitted. It is an agency which employs the selfish principle in the promotion of social happiness, by distributing the means of enjoyment, and rewarding the distributors.

War, on the other hand, destroys these blessings; and not only destroys the blessings, but the beings for and to whom these blessings of God were given.*

This admits of an appropriate illustration, by putting the names of a couple of heroes of modern aggression and violence, in contrast with two of their contemporaries, the champions of improvement, in England. At the very period when Potemkin and Suwarrow were engaged in effecting their important Russian conquests in Poland and the Crimea, and whilst those monsters of carnage were filling the world with the glare of their fame, by destroying God's image, and wasting his blessings, two obscure individuals were quietly gaining victories in the realms of science, which have produced a more abundant harvest of wealth and power to their native country, than has been acquired by all the wars during the last two centuries. Those illustrious leaders in the march of improvement, Watt and Arkwright, with a band of subalterns, the thousand ingenious and practical discoverers who have followed in their train, have, with their armies of artizans, conferred a power and consequence upon England, springing from successive triumphs in the physical sciences and the mechanical arts, and wholly independent of territorial increase, compared with which, all that she owes to the evanescent exploits of Wellington, and her warrior heroes, shrinks into insignificance. May we not with safety predict, that the steam-engine will, at no distant day, produce moral and physical changes, all over the world, of a magnitude and permanency surpassing the effects of all the wars and conquests which have convulsed mankind since the beginning of time? England owes to the peaceful exploits of Watt and Arkwright, and not to the deeds of Nelson and Wellington, her commerce, which now extends to every corner of the earth.

England pursuing continental wars, now wasting her resources and destroying her people in pursuing a phantom, called the balance of power, by which was really meant the game of king-craft, the object of the players being to keep as large a share of the chess-board, and as great a number of human machines for their own share and use as possible; then warring with her own colonies to subject their commerce to her own partial demands, and for the right to tax them without representation; then subsidizing immense hordes of European hirelings to attack, and joining in attacking the French republic, because the French dethroned a bad king†; and resuming that war after a short peace, which might more properly be termed an armed truce; ended with a mortgage upon the thews and sinews of her industrious people, and of those unborn, for 800 millions of debt.

* The subsequent portion is abridged and slightly altered from Mr. Cobden's celebrated pamphlet on the Russo phobia.

† Poor Louis, could he have foreseen results, might have exclaimed, "Save me from my friends, and I shall save my head!"

England, by exploring the recesses of her mines, by constructing canals, docks, and railroads, by her mechanical inventions, and by the patience and the ingenuity of her manufacturers in adapting their fabrics to meet the varying wants and tastes of every habitable latitude of the earth's surface; England with her steam-engine and spinning frame, has erected the standard of improvement, around which every nation of the world has already prepared to rally; she has, by the magic of her machinery, united for ever two remote hemispheres in the bonds of peace, by placing Europe and America in absolute and inextricable dependence on each other; England's industrious classes, through the energy of their commercial enterprise, are, at this moment, influencing the civilization of the whole world, by stimulating the labour, exciting the curiosity, and promoting the taste for refinement of barbarous communities; and, above all, by acquiring and teaching to surrounding nations the beneficent attachment to peace; such are the moral effects of commerce, and its glorious fruits.

SUGGESTIONS FOR THE IMPROVEMENT OF PHRENOLOGICAL BUSTS.

To the Editor of the Anthropological Magazine.

Sir,—When I consider the present state of Phrenology—the progress which it is making—the public excitement which the science has awakened,—I feel that it is high time that the apparatus employed by the studiers of the science should be perfected. It is not by men of science, but by adventurers, that phrenological tools have been manufactured; and it, therefore, does not occasion surprise that they have hitherto been imperfect and injurious. When a delicate operation is being performed, a defective instrument is less useful than no tool: for its imperfection may not only retard, but destroy the work which it was intended to execute. No operations require more certainty than those of Phrenology. Should an erroneous impression be imbibed, it may occasion irreparable evil. It is, consequently, with regret that I have found the principal tool of Phrenology, namely, the marked busts, so defective as to require animadversion; but I trust that it is only necessary for the observer to point out these imperfections to lead to a complete reformation.

The issue of a bust under the sanction of the London and Edinburgh Phrenological Societies, is loudly demanded. For the busts at present used there is no sufficient authority; and, therefore, there is as much probability that they are erroneous, as there is that they are correct. To illustrate my remark:—I have had an opportunity afforded me of inspecting *ten* busts, and I have found that they have only agreed in one thing, namely, in varying from each other. Many had the organs misplaced; some were numbered incorrectly; whilst, in others, I could find no trace of some of the most important faculties. This, of course, is of great importance to the wealthless phrenologist. His circumstances will not allow him to purchase of

the recognized tradesman: he is, therefore, compelled to deal at the shop of him whose charge is moderate; and, should the bust be incorrect in any particular, he may imbibe mistaken notions, such as time will never eradicate.

One error which meets an observer in every bust, is the unnatural marking of the organs. The geometrical figures may justly represent their objects; but they have no relation to the form of any organ of the brain,—on the contrary, to use a common phrase, "they are chosen at random." This is obviously wrong. Every organ possesses some specific form.* If they did not, then we should not be able to distinguish them from those surrounding,—if they did not, we should not know where they commence, and where they terminate. It therefore appears to me, that as nature has pointed out the form of the organs, it is our duty to follow her dictates; which we shall do by substituting the natural for the present mode of figuring.

The size of the busts should also be increased. At present they are much smaller than a child's head; and, in a slight degree, larger than a "ribstone pippin." So small are they, that the organs surrounding the superciliary ridge can scarcely be perceived; however, to remedy this defect, they are usually crowded together beneath the eye-brow! When they are delineated in their proper situations, to distinguish the limits assigned to them is no easy task: in fact, to do so exactly, would require the assistance of an oxy-hydrogen microscope of no small power. To remedy this imperfection, let the authorized bust be of a natural size, taking the average of sturdy adults, whose faculties are in a state of equilibrium, as the model.

Some of these suggestions may be considered inutile; but this I cannot grant. Should their adoption produce *no other* benefit, they would effect much by preventing evil. Whenever wrong conceptions enter the public mind there is every probability that they will not be easily eradicated. First impressions are ever the most lasting: how desirable, therefore, is it that they should be correct. Man is not a philosopher. In most cases he acts as feeling impels, he decides as feeling prompts: and, as the current of his emotion runs, the same channel will be the direction which his opinions will take. This is not, however, irremediable. Man can be made philosophic. Right education *can* do it,—a system of education, founded on the principles of Phrenology, *will* do it. Let the child be taught to think, and the man will be a man of reflection! It is a truth, as correct in sentiment, as it is nobly-simple in language,—

> "*The child is father to the man;*
> And I could wish his days might be
> Bound each to each, by natural piety."

I am, your's truly,

New Court, Carey Street. E. J. HYTCH.

---

* For instance, see "comparison." The form, however, in the busts is not such as it appears in nature: in the one it is drawn as a parallelogram; in the other it resembles a reversed cone.—E. J. H.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

No. 5.] JANUARY 1, 1837. [Vol. II.

PHRENOLOGY AND EDUCATION.

Essay III. *Read before the Anthropological Society, by* John Epps, M.D.

In the preceding Essays the attempt was made to demonstrate that Education is the drawing forth of the faculties: that the objects, suited to act upon, so as to draw forth these faculties, constitute the food, upon which these faculties thrive: that the Education to be good, proper food, and that food prepared in the proper way, must be, at the proper seasons, presented to the faculties: and, in conclusion, as sometimes the mind is best able to judge of what is proper, by that which is improper, an examination was entered into of a great variety of foods prepared for the faculties, and the impropriety thereof was explained and enforced.

In this Essay it is proposed to notice WHAT IS PROPER FOOD.

Proper food must have one character, and that is *truth.* This realized, the next step is to ascertain the *best mode of preparation,* and the *best time of presentation.*

Truth may be intellectual, physical, moral, and religious.

In reference to intellectual truths, the following are the heads under which they may be arranged.

1. Pictorial or Scriptorial truth: 2. Orthographical or Verbal truth: 3. Geographical truth: 4. Arithmetical truth.

Physical truth may be considered to embrace all SCIENTIFIC truths, which come under the notice more particularly of the intellectual powers.

These classes of truth, under their various divisions, will now be taken into consideration.

1. PICTORIAL TRUTH.

The organ of form, every phrenologist is aware, is situated below that of *individuality:* and as individuality seems to be active in inducing and enabling the child to notice individual objects, the situation of the organ of form satisfactorily testifies to the fact, that the *form* or *shape* of the body is likely to be the feature of that individual body very early noticed by the little observer.

This organ, therefore, is educated by forms of the objects presented. And, it is quite evident, that, just in proportion as *accurate* forms, namely, forms *corresponding to the unwarped productions of nature,* or, in other words, forms *correspondent to truth,*

are presented, just in proportion will be the proper education of this faculty. Hence the necessity becomes apparent of presenting well-formed statues, correct representations of animals and other objects, to the infantile mind. And it is pleasing to observe that a great improvement has taken place in this respect in the nature of the food provided, the drawings of animals in children's books being so much improved: and it is also pleasing to remark the immense number of print shops to be met with in the streets, and also the immense number of individuals continually surrounding them, and admiring the contents.

The great amount of instruction to be communicated to a child through the medium of these models is hardly conceivable. What is called "Noah's ark," has, by its contents, now very much improved in shape, (there is room for improvement), made many children acquainted with animals in a most effectual and pleasing way; and although small, yet if they are made of their relative sizes, the child is not deceived: more especially, if some models of Noah and his family are placed beside, made of the proper relative size. Our friend, John Sholl, lost, a short time since, a dear little fellow, who had a very large organ of form as well as individuality, and he, when the boar and the sow, among the animals in a Noah's ark, were presented to him, distinguished at once the one from the other, though the only difference, represented in the model, was in the form of the *snout*.

Correct *models*, where the originals cannot be met with, should be brought before the child: and thus the organ of form will have such a deeply imprinted natural love of truth in regard to forms, that no after circumstances will be enabled to destroy the intensity of the desire for truth of this kind. Train up a child in the way he should go, in reference to the organ of form, and when he is old he shall not depart from it.

The importance of thus presenting perfect models may be seen in the fact, that, like as the tongue is able to be brought to relish things even disagreeable, so the organ of form may be brought, by the constant presentation of unnatural forms, into that state, to feel a want of stimulus when naturally formed bodies are presented: or, if not to experience this want, at least to feel a degree of unpleasantness from the difference between the stimulus thus arising, and those stimuli arising from the presentation of the ill-formed.

On the other hand, conceive a child, surrounded from his infancy with deformed individuals, and then introduce him into a company of Circassian forms, and it may be reasonably supposed that the impression, produced by the sight of the latter, would be unpleasant, because the faculty had become so habituated to the stimulus connected with the presentation of the deformed shapes, that any other stimulus becomes disagreeable. Whereas, on the other hand, surround a child with none but beautiful forms, and then the original relationship of harmony established by the Creator between the organ of form and true forms will be so cultivated, that, when the child is brought into the company of the deformed, there is no more fear of his loving the deformed forms, than there is of one who has

always lived with angels, falling in love with devils: that is, supposing them to be ugly.

These may be deemed extreme cases, it is true; but the illustration, thence deduced, will serve to show the effects, which are likely to result from cases which may be considered intermediate.

It is worthy of remark, in reference to the early activity of this faculty, that the first thing that children, for the most part, love to do, is to *scratch with a pencil.* This should be directed, and, as soon as possible, they should be induced to copy correct forms, and they should be further induced to make themselves perfect masters of the *fundamental forms*, before proceeding to the more complicated. To render this more clear, the following anecdote, related to me by the talented portrait painter, CHATFIELD, may be useful. A boy, of poor parents, was brought under the notice of this gentleman, as being very clever, (not having had any instruction,) in painting likenesses. Mr. Chatfield noticed him, and recommended that he should not proceed with portrait painting, until he made himself perfect master of the human face, and other parts of the human body, by drawing the outlines from the best models: and offered, in addition, to assist him in this proper mode of education. The boy, deceived in part by the belief in his great talents, and perhaps partly influenced by the poverty of his parents, would not adhere to the advice, but went on painting portraits, and *now* is nothing but a dauber; making sometimes striking likenesses, but never able to give general accuracy or finish to his pictures.

In teaching the child *writing*, in other words, educating the organ of form so as to enable the *mind* so to direct the *hand* as to make letters, the best examples of writing should be placed before the child: thus the organ of form would have impressions made upon it of the most superior kind. And on this subject, the work entitled Graphics, by Rembrandt Peale, is earnestly recommended to the parent, as containing an account of the methods most effectual, and most certain, and most rapid, in inducing accuracy, and in developing the power of drawing, and of writing correctly: this writer showing that the foundation of drawing and writing consists in the capabilities of making, and appreciating, *straight* lines and *curves*: and establishing the necessity of the child becoming perfectly skilled in drawing, first, straight lines, and then curves.

This writer remarks, "that the art of drawing is the art of seeing and understanding, as well as of imitating with correctness;" and there are many other suggestions and remarks in the book truly valuable: and it is pleasing to add, that the work is written by an American, showing the great attention paid to education in America.

The second kind of truth to be noticed is ORTHOGRAPHICAL or *verbal* truth.

Becoming acquainted with this truth is called "learning the letters." The great point is to devise the most effectual means by which the forms of the letters shall so impress the organ of form as not to be forgotten.

The method to be proposed is one which was first hinted to the

Essayist by Mr. Judah Abraham, who is very successful in communicating his knowledge to children. It consists in teaching the points in which the letters correspond, proceeding from the most simple to the most complicated. A perpendicular straight line (I) is *I*: two straight lines, made to converge, (V) make *V*: two straight lines crossing each other (X) make *X*: two straight lines one placed perpendicular and the other horizontal (L) make *L*: two straight lines, one horizontally placed above, supported by the other, a perpendicular (T) make *T*. Thus are formed from one and two straight lines *I*, *V*, *X*, *L*, *T*, five letters.

Three straight lines, two perpendicular, and one horizontal, joining the two (H) make *H*: three straight lines, two converging at the top, and one horizontal, joining the two (A) make *A*: three straight lines, two placed oblique in the same direction, the top of the one being joined to the bottom of the other by means of another straight line (N) make *N*: three straight lines, one placed perpendicular, two horizontal, one at the top of the perpendicular, the other in the middle of the perpendicular (F) form *F*: three straight lines, one placed perpendicular, the two others oblique, meeting each other in the centre of the perpendicular line (K) make *K*: three straight lines, one placed perpendicular, and two oblique, converging so as to meet at the top of the perpendicular (Y) make *Y*: three straight lines, two horizontal and one oblique, uniting the two (*Z*) make *Z*. Three straight lines, differently placed, producing *H*, *A*, *N*, *F*, *K*, *Y*, *Z*, seven letters.

Four straight lines, two perpendicular, and two oblique proceeding from the tops of the perpendiculars, and converging in the centre between the two perpendiculars (M) make *M*: four straight lines, two placed oblique in one direction, and two in another joining these two (W) make *W*: four straight lines, one placed perpendicular, and three horizontal (E) make *E*. Thus with four straight lines making *M*, *W*, *E*, three letters.

The other form necessary to make all the letters is the *curved line*.

One curve C is the *C*: two curves O the *O*: also (S) the *S*: three curves (Q) make *Q*.

One curve with a perpendicular straight line upon it (J) make *J*: one curve with one straight line (P) make *P*: when the curve embraces the whole of the perpendicular line (D) makes *D*: one curve with a horizontal straight line (G) make *G*.

Two curves with one straight line (B) make *B*: with the lower of the two curves turned outwards (R) make *R*.

One curve with two perpendicular straight lines (U) make *U*.

In this way can the alphabet be taught. And, in adopting this method, or any other, the rule should be to make *the strongest intellectual faculty the centre* to which the method adopted should have reference. Letters thus formed may be easily obtained, as wooden letters in this shape are now becoming common over tradesmen's windows.

Having learned the forms of the letters, and these should be well impressed upon the mind before any thing else should be attempted,

the child will be enabled to make, very early, letters in this way. He can then be taught to copy words, and thus he will have impressed on his mind the proper order in which the letters occur in words, which is *spelling*. And thus he will get an immense number of words, spelled accurately, without being pestered by thumbing Johnson's or any other dictionary; and parents should ever remember, that the child in learning should be aided by calling as many faculties into activity as possible; and this mode will call form, size, and locality, as well as order, into activity, besides the aid which can be derived from the mechanical act of copying.

It also should be remembered, that the child wants *words only as he wants to express his ideas;* and to make him learn words before he has the ideas, or the objects, or the circumstances connected with the words, is as absurd as a person, under the idea of furnishing a house, to fill it with such a quantity of furniture, to him not at all useful, and which prevents him, by its quantity, from using that which he has, and for which he has need. Let the habit be cultivated of writing the words he adds to his stock, and the memory of the order, in which the letters occur, will be deeply impressed upon his mind.

Writing and *reading* are considered, therefore, as exciting so many faculties into action, the best means of impressing orthography upon the child's mind.

Writing and reading, as exciting so many faculties, and therefore affording so many gratifications, give sufficient motives to subdue that great tendency to constant jumping, romping, (muscular gratifications) which prevail in childhood: whereas, the learning of spelling, that is, the *mere order* in which the letters stand marshalled in particular words, brings so few faculties into play, as not to afford sufficient motives to the child to restrain him from the delights of the muscular exercises, or, as it is called, "play." And every one must know how unwillingly the child leaves play to come to spelling: whereas, to hear interesting tales, which are *a book of tales spoken*, he will sit motionless; and will often come from his play to his mamma, and say, "Dear mamma, tell me a nice little story." Now why does he do this? Because the story calls into activity so many feelings and faculties, which activity is attended with gratifications so strong, as to surpass the gratification arising from physical exercises.

Arithmetical truth appeals to the organ of *Number*. It is, therefore, quite evident that a difference of power, as dependent upon the difference in the development of this organ, must influence the capability of the child in appreciating arithmetical truth.

The labours, however, of those interested in the education of children, have been turned very much to this subject; and the interesting modes adopted in the infant schools, in the London Road school, and at the several schools at Edinburgh, are so within the reach of almost all readers, that they are referred to the practical demonstration of the efficacious modes of teaching arithmetic, which these institutions afford.

That very young children can be taught effectually the princi-

ples of arithmetic, and even of algebra, sufficient evidence exists. Mr. Harris, of Walworth, has a son, not more than eleven years of age, who teaches students older than himself the principles of algebra and of arithmetic: All that is required is to adopt, in teaching arithmetic, that method which will enable the faculties, in which the child is most developed, to aid the organ of number.

In many cases, geometrical forms are more easily remembered than arithmetical figures or algebraical signs. Children with large organs of form, and of size, will soon become acquainted with the principal geometrical forms; and, thus a foundation in early life may be laid for developing the mind by the exercise of sound reasoning, which geometrical demonstrations so pleasingly and effectively afford.

The next kind of truth is GEOGRAPHICAL truth.

Knowledge, it perhaps cannot be too often repeated, is *truth;* and therefore, in every department, it should be the aim of the educationist to find out the *truth:* otherwise he will be teaching what, afterwards, the child will have to unlearn: a most absurd waste of time. Not only also is truth to be sought after; but, when obtained, the educationist is to seek out the most effectual method for its communication.

In the teaching of geography, much can be done in reference to this last point. Instead of teaching the child, as we used to be taught at school, that, in Russia there are such and such cities; in Britain, such and such; let the child be taught the *rivers*, say, of Britain; let the longest river, or the shortest, be taken first: take the Thames: let him learn where it originates: let him trace its course, marking every interesting place which it passes in that course; teaching, at the same time, the circumstances of note connected with each place. For instance, the Thames passes by Woodstock, where gloves of a peculiar excellence used to be made; by Oxford, where learning and bigotry have their seats; by Windsor, where princes have resided; by Staines, near which is Runnymede; and so to London; and thence to the termination of this in the sea.

So with other rivers.

By this method of instruction, several most important aids are given to the child. His individuality, in remembering the names of the places, is aided by his locality, in tracing the course of the river: his eventuality also aids, by having presented to it the circumstances of note connected with each place: and, at the same time, the important bearings which a river has on the prosperity of a country, will be shown by the valuable cities and towns situated on its banks.

The necessity of seeking out the most *correct maps*, must be evident to every one; since, thus alone, geographical truth can be presented to the child. Every incorrect map gives geographical lies for food; and, consequently, the child must be poisoned.

It will be advantageous to make the BIBLE afford as many lessons as possible for the instruction in geographical knowledge. Thus the journeying of the Israelites, from the departure of Abraham to

the settlement of his descendants in the promised land, will form an interesting series of geographical lessons. It will associate much interest with the reading of the Scriptures, and will take off that tiresomeness, connected with the perusal of hard names, not associated with any thing but their sounds. The travels of Paul, the various places noticed in the various parts of the Old and New Testament, will form excellent subjects for geographical instruction. And, to aid the child in these investigations, several maps are published by Darton and Harvey: and in the Biblical Annual, the whole are to be found compressed into a small compass, and engraved with the greatest clearness by Mr. Starling.

Again, when any expedition to the North Pole, or any other place is on the tapis, let the child be taught to follow the course of the expedition, as its progress is made known.

In the case of war, let the child be taught to follow the contending armies: thus, in the case of Spain, how much information might be obtained by having a map of Spain before the reader, and following in the same the step of the competitors.

The geographical truth thus obtained, would never be removed from the mind; accuracy of observation would be induced, and any errors would soon be detected.

When it is possible, the child should draw the course of a river, and mark down the places upon its banks, and if unable to write, should be invited to state anything particular regarding the places so marked down.

Such are some of the methods, which might be useful in impressing geographical truths on the mind.

A similar course, so far as possible, might be adopted, in reference to the globes; and thus, instead of tormenting the poor child with compound, and, to a certain extent, abstract notions respecting *latitudes* and *longitudes*, he will obtain with pleasure an accurate knowledge of places, and the relative positions which they bear to one another. And why? Because many faculties are called into activity by this mode of tuition.

THE BOOK OF MOLOCH.

The first chapter of this book was published in the second number of the first series of this Magazine, namely October, 1835. Four other chapters have since been discovered; they have come from America, through a circuitous route, to the Editor. The second chapter follows. The third, fourth, and fifth chapters will be published in the succeeding numbers.

Chapter II.

The Style and Manner of Living.

1. NOW ye who are called and chosen to go forth to all nations, and among all people, in time present and time to come, to preach the word, see ye take unto yourselves marks, yea, many outward marks, whereby ye shall be known of men.

2. Be ye not called as men are called: but be ye called POPE, ARCHBISHOP, ARCHDEACON, or DIVINE, or REVEREND, or RIGHT-REVEREND, or somelike holy name: so may you show forth your honour and your calling.*

3. And let your dwelling places be houses of splendour and edifices of cost: and let your doors be decked with plates of brass: and let your names, even your reverend titles, be graven thereon: so shall it be as a sign.

4. Let your garments in which you minister, be garments, not as the garments of men, neither let them "be seamless garments woven throughout:" but let them be robes of richest silk, and robes of fine linen of curious device and of costly workmanship: and have ye robes of black and of white, that ye may change the one for the other, so shall ye show forth your wisdom and humility.

5. Let your fare be sumptuous, not plain and frugal, as the fare of the husbandman who tilleth the ground: but live ye on the fat of the land, taking "good heed for the morrow, and wherewithal ye shall be fed."

6. And drink ye of the wines of the vintage brought from afar, and wines of great price: then shall the *light* of your *spirits* be the light of your *countenances:* and your faces shall be bright, even as the morning sun shall your faces glow in brightness: thus shall ye show forth your moderation and your temperance in all things.

7. Let the *houses* in which you preach be called *churches;* and let them be built in manner of great ornament without, and adorned with much cost within; with rich pillars and paints; and with fine altars and pedestals, and urns of precious stones; and cloths and velvet of scarlet, and vessels of silver.

8. And let there be rooms for the changing of robes; and places for the precious metals and the mitres.

9. And let the house be divided into seats for the congregation, and let every man know his own seat; and let the first seats in the front of the altar be for the rich that pay by thousands; and the next for the poorer that pay by hundreds; and the last for those that pay for tens. And let the poor man sit behind the door.†

10. And let the seats be garnished with cushions, and crimson cloth, and with fine velvet; for if the houses of players and vain people, who deal in idle sayings and shows of mockery, be rich and gorgeous, how much more so should be the houses that are dedicated to him "that is meek and lowly in spirit."

---

* Divine—reverend—right-reverend—most reverend—reverend lord, &c. are among the titles now given to the clergy of Christendom, more truly Devildom. The first head of the episcopal church is "his *grace* the most reverend Father in God Dr. S. lord archbishop of Canterbury." But in Christ's time the command was, "Be not ye called Rabbi, for one is your master, even Christ; and all you brethren. And call no man your father upon the earth: for one is your father which is in heaven. Neither be ye called masters: for one is your master, even Christ." Matthew xxiii.

† "And whosoever shall exalt himself shall be abased; and he that shall humble himself shall be exalted." Matthew xxiii.

Essay II.—The USES of CHEMISTRY, by Dr. Hunter Lane.

Continued from page 108.

Associated as natural and chemical philosophy are with the fundamental constitution of medical science, it would be but a very partial study of our profession that would attempt to sever them; and the imperfections of such a system of medical study would, at the period when the amplest aid that can be afforded by the collateral sciences is most imperatively required, become deplorably obvious to the individuals, who dared to neglect those branches, which are in any degree capable of yielding assistance in the practice of medicine. As the objects of the healing art are the restoration and the preservation of health in the human machine, it is, of course necessary, that they who presume to realize the attainment of these, should be acquainted with the natural mechanism, the normal conditions, and the healthy functions of the living body; so that, having the standard of health, they may be able to appreciate the species and the amount of abnormal action they are required to correct, and know the precise object to which their endeavours are to be directed. For the acquisition of this physiological knowledge, the aid of every branch of philosophy must be solicited, as the principles and the laws of each department are indispensably requisite for the exposition and the elucidation of those states and actions, upon which the natural conditions and functions of the animal frame depend. The human body may not merely be likened to, but it may actually be described, as an animated machine, in which the nicest mechanical principles and the most delicate chemical laws are combined, by whose united operations it is kept in a condition capable of manifesting the higher phenomena of vitality. If such description be true, the necessity of an intimate familiarity with the laws of Physics and Chemistry must be self-evident. Of what use would a knowledge of anatomy prove to the surgeon, were he not capable of ascertaining the uses of the several parts as elucidated by mechanics? In order to exercise his art with the fullest advantage to his patients and credit to himself, he ought to be an accomplished mechanic. There is scarcely an operation he may be required to perform, but demands some mechanical knowledge; and, by the greater cultivation of this knowledge it is that we find modern surgery has so much excelled the practice of by-gone ages. I am, however, spared the trouble of entering upon this subject, by the publications which are in the hands of every enlightened practitioner, and which ought to be amongst the earliest studies of every medical tyro. I allude to Sir Charles Bell's admirable Treatise on Animal Mechanics, published by the Society for the Diffusion of Useful Knowledge; and Dr. Arnott's Elements of Physics. In the former is beautifully exemplified the high value of mechanical knowledge to the medical student, by the excellent investigation of the animal frame, purely in reference to its mechanical construction and actions. In Dr. Arnott's we have the minimum of information on physics, with which the medical

student should be satisfied; and, without which he must daily feel at a loss in the practical exercise of his profession. In the higher department of medical science, physiology especially, it is of the last importance that the student should be capable of bringing physical and chemical laws to illustrate and explain the several processes carried on in the animal machine. Without such assistance he can no more attempt, with any probability of success, to comprehend and account for the operations of the different apparatus in the body, than an individual could hope, without the help of Chemistry, to understand and explain the changes constantly taking place amidst the various matters of the inorganic world. Two examples may suffice to show the impossibility of our possessing any correct information of the operations of the body without such collateral aid. How would it be possible to understand the hydraulic apparatus of the heart, much less to investigate its actions for the purpose of learning the mode of its operation, without an intimacy with physical principles? Again, who could explain to us the results of the respiratory process, without the help of Chemistry? To speak generally of the influence which the cultivation of Chemistry, and its application as an instrument of research in physiological investigations, has exerted over the development of physiology, as a science, would need only an appeal to the rapid strides which this part of medical philosophy has made during the last twenty years. By our recently acquired power of detecting the minutest portions of extraneous substances in the circulating fluids of the body, we have been enabled, in a peculiar manner, to enlarge our knowledge of the laws of absorption. The same power has greatly aided the experimentalist in ascertaining the respective part performed by the veins and the lymphatics in the discharge of this function. It has contributed to the discovery of the permeability of the living tissues, and the influence which this property has in producing many of the phenomena of absorption. It has helped to unfold the power exercised by absorption in the development of many vital actions, which were formerly ascribed to nervous operations. In short, it has been one of the principal guides by which the progress of Magendie and his followers have been directed in their brilliant career of discovery. The facilities such knowledge gives the student of our profession will be understood when he enters upon its prosecution, by the difficulties cast in his way for the want of this information. There will, therefore, be little danger of his not attempting to gain the quantum requisite for these purposes. The necessity of possessing this knowledge for the really useful and practical purposes of his science may not, however, strike him at so early a period, but may impress his mind at a time when the commencement of new labours may appear too irksome; wherefore I would more strongly insist on the expediency of your applying yourselves to these studies at an early part of your educational career.

To give you some idea of the influence exercised by Chemistry over your art; to point out the importance to be attached to it as a constituent of medical science; and to indicate the value its know-

ledge may prove to you when called upon to apply the result of your education to the alleviation of suffering, the restoration of health, or the preservation of life, and thereby induce you to seek its attainment, I might adduce a variety of circumstances in which Chemistry prominently stands forward to advance the practical powers of our art. I might show it to be the spring whence we derive the majority of our medicinal agents, and through whose instrumentality are separated the useless ingredients from the simple substance, on which depend, and in which are concentrated, the virtues of those crude agents, whose natural adulterations have so long been unavoidable inconveniences to the practitioner.

If we only contemplate the pharmacopeias of the present date, (not the pharmacopeia of the London College of Physicans,) and contrast their preparations with the substances employed by the faculty during the foregoing century, we must be irresistibly struck with the remarkable improvement that has been effected, and the simplicity that now characterizes the catalogue of remedial agents. Where we were formerly limited to the use of the crude substances, the original roots, barks, or woods, ever variable in their properties in consequence of the various external influences to which they might have been exposed, we are now in possession of the active principles separated by chemical processes, and prepared with such accuracy, that their properties are fixed and invariable; or, if changeable by external causes, these causes are known: their effects and modes of operation ascertained, so that means can be adopted to counteract this deteriorating influence. The benefits thus conferred on the practitioner, and the superiority it gives him over his predecessors, must at once present themselves to the minds of all. Indeed, by affording him the distinct active elementary principles, instead of the rude compound of inert, noxious, and medicinal ingredients, and by enabling him to divest his medicines of that uncertainty which must have constantly attended their administration in the adulterated state of nature, Chemistry may be said to have rendered the highest service to the practical physician that he could derive from any science.

It would be exceedingly easy to exemplify the difference between the prescription of any of the vegetables of the *materia medica* and the administration of their alkaloids. Peruvian bark may be instanced:—As formerly employed, it had, of course, after its exhibition, to be converted by the process of digestion into a state capable of operating on the living tissue; thus, therefore, independantly of the various circumstances, by which its relative proportions of active ingredients may have been changed, and its operation thereby varied, the stomach was, at a time when the general frame needed invigoration, and when this organ was presumed to suffer from the general derangement, required to exert its fullest digestive functions. Before the medicinal elements of the bark could be separated it was necessary to destroy the vegetable texture, and to convert the fibre, mucilage, resin, lime, silica, cinchonia, &c. into a mass, from which a very minor part only, the cinchonia, could be eliminated. Now, however, this complicated process—this call

upon the digestive functions of the stomach, is spared. Chemistry has separated the useless and extraneous ingredients, so that we are enabled to administer the actual substance singly and unalloyed by any vegetable adulterations, its solution being the only process to be accomplished in the stomach before it is fitted to exercise its specific medicinal agency. The same obtains with respect to an innumerable list of articles in the *materia medica*, taken from the mineral and the vegetable kingdom. Opium is, probably as instructive an example of the benefits derivable from the application of analytic and synthetic Chemistry, to the improvement of our therapeutical agents, as can be adduced. It was formerly employed as a substance whose property was considered to be elementary and single. Its operation has, however, frequently been observed to be various, inconsistent, and compound. Sometimes it has produced a sedative, and sometimes a stimulant effect. Sometimes it has operated prejudicially on a certain organ or class of organs of the body, exclusively of all others; and sometimes it has acted as a poison. Nor were these opposite effects brought about by any variation in the dose, or any difference in the temperament of the individual, in whom they were observed; but arising from the same quantities, given at different times, to the same persons. These results have appeared inexplicable by any influence of idiosyncrasy, and perhaps only attributable to variations of the relative proportions of the different constituents of opium. Such explanation has been confirmed by the recent analysis of this substance. Opium seems to be composed of elements, as distinct and opposite in their respective operations on the human body, as any two individual members of the pharmacopeia. Of the fifteen elements of opium, five may be described as its active medicinal principles. Of these, two are narcotic, one anodyne, and one highly poisonous, the papaverin, which is reported to act upon one part of the animal body. Thus it becomes evident, that, previously to the exposition, made by analytic Chemistry, we had been employing medicines, whose operations were compound, and whose elementary principles were exciting conflicting actions in the body, quite at variance with the singleness of our views in their administration.

Connected with this subject is the assistance derivable from chemical knowledge in the exhibition of particular medicines in their elementary states, whether separately or in combination. Knowing the synthetical action of certain medicines with different articles of ordinary diet, we are taught the necessity of avoiding the administration of remedies after foods, with which they may combine, and so form new products, whose operation may be opposed to that of the medicines prescribed, or with which they may compose inert or inefficacious mixtures. Having found, for instance, that tartar emetic forms with tannin an inert substance, we are at once shown the impropriety of giving this substance for any medicinal purpose after the patient has been taking any food containing the principle, tannin. Many other equally valuable practical instructions may be elicited from our present knowledge of the chemical action taking place between the articles of the *materia medica* and the articles of *diet*.

There is another department, of the highest utility in the practice

of medicine, which depends for its just exercise upon the nicest chemical discrimination and tact. My allusion to the *art of prescribing* will, no doubt, be anticipated. The design of this art being to combine particular medicaments so that the individual ingredients may maintain their independance and activity; and, also, that the general combination should tend to certain ends, or to the production of given effects in the human body. It must of course be of the greatest consequence, that the individual, practising it, should be familiar with the chemical constitution of the substances; the relation these bear to each other in their chemical affinities; the result of any new union they may contract with each other; and the operation of any new influences and agencies to which they may be exposed, either previously to or after their exhibition. Without such information, which implies no inconsiderable intimacy with the general and particular laws of Chemistry, the art of prescribing must be ignorance, confusion, and rashness, combining their efforts to subvert one of the most serious offices of the practical physician, or to imitate the dangerous functions of blind empiricism.

By an accurate knowledge of chemical affinities, and definite proportions, with a proper estimation of the general laws of the science, a physician acquires powers over the ordinary members of the pharmacopeial catalogue almost incredible. He converts a mortar into a crucible, from which his extempore mixture of elementary substances proceeds in new forms and with new properties, which may be made peculiarly and exclusively referable to the object he aims at. He makes the phial the laboratory, in which transformations are effected by every additional substance, until these terminate in the production of some fixed and definite compound. This is the power the scientific physician ought to possess; and, without which, he can neither practice his art with satisfaction to himself nor with safety to his patients.

Enjoying the power here alluded to, and possessing the chemical information this power presupposes, a physician may adapt it to various purposes connected with his practice that may not be easily anticipated. It may lead him to correct conclusions respecting the origin of medicinal virtues in substances, conclusions overlooked or unappreciated by his less gifted brethren. The history of one of our present most fashionable remedies singularly exemplifies this truth. It was remarked by a soap-boiler, that the residuum of his ley, when exhausted of the alkali for which it was employed, produced a corrosion of his copper boiler, for which he could not assign any reason. The analysis of this substance by a scientific chemist resulted in the discovery of the singular and important chemical element, IODINE. The properties of this, when examined, were found most appositely to illustrate and support a variety of new, curious, interesting, and instructive views, at that period gaining ground in Chemistry. Curiosity being excited, the investigation was prosecuted with energy, until at length the origin of this new substance was traced to the sea plants, from whose ashes the principal ingredient of soap is obtained; and, ultimately, it was followed up to the sea-water itself,—whence it was hunted through nature,

discovered in salt mines, and springs, and pursued into all bodies which have a marine origin; and, amongst the rest, into sponge. Dr. Coindet, calling to mind a reputed remedy for the cure of one of the most unsightly and grievous disorders to which the human species is subject, goitre, which infests the inhabitants of mountainous districts to an extent that is happily unknown to us, and which was said to have been originally cured by the ashes of burnt sponge, conceived the idea of this newly detected substance being the active principle of the sponge. With this view he instituted experiments, the results of which confirmed his opinion by identifying iodine with the active medicinal principle of burnt sponge; and which has led to the introduction of this element into our pharmacopeia, as a substitute for the more bulky, more variable, and ruder preparation of sponge. It is in this manner that a mind, imbued with the best principles of sound philosophy, is capable of seizing on facts and applying them to analagous cases, so as to make them at once subservient to the detection and discovery of the riches of nature, where her wealth was least suspected to exist. It is in this way, that, a mind, capable of exercising such powers, evinces its superiority over the meaner herd, whose satisfaction is found in mediocrity.

There is one other application of Chemistry to medical science, to which I must call your attention; I mean to FORENSIC MEDICINE. Here the offices of Chemistry are of the most serious and responsible character. To the practitioner's practical knowledge of Chemistry may be confided the life of individuals, already endangered by the administration of poison; or, to his practical skill and analytical dexterity, may be committed the establishment of criminality or the vindication of innocence. In either capacity, he must feel the importance of this collateral science,—and in either, he must be impressed with the dangers of hazarding opinions, unguided by its principles.

In cases of poisoning, where the utmost energy and the greatest promptitude are required; where the preservation of life may hang upon the quickness, with which the practitioner can bring his knowledge to an immediate bearing upon the case of the sufferer; the promptness and the readiness, with which he can carry the result of his reflections into effect; and the ease with which he may seize any accidental circumstance to aid his purpose, he will find the paramount value of *practical* Chemistry. It is from its stores only he can draw any serviceable materials; and, if not available, inefficiency under such disastrous circumstances, must convey the severest reproaches and harshest censure to his mind, for his neglect in not laying up a magazine of those implements, which he is now especially solicited, summoned, and expected to provide. An individual, unsupported by those internal resources, which Chemical knowledge presents, must be guided by the mere rules of empiricism, which too frequently lead to the fruitless consumption of the only moment that could be rendered of any avail in counteracting the deleterious operation of the poisons administered. Modern Chemistry has exposed the errors of past years, and has expelled from the practice of medicine a host of popular remedies, the offsprings of hasty empiricism, which are still employed by the uneducated and unadvised in Chemistry; who, as

pertinaciously as ignorantly, still adhere to the practice of bygone toxicologists in using alkalis as antidotes to arsenic and oxalic acid; of alkaline sulphurets, in poisoning with arsenic and other metallic compounds; of acetic acid,in the poisoning with salts of copper, or with opium and other narcotic vegetables; and fixed oil, in poisoning by cantharides; which antidotes have been shown to produce, with the substances whose operations they were severally intended to antagonize, poisons equally, if not more active, than the original agents. Were it only to avoid the melancholy consequences of such conduct, you would be imperatively required to gain a competent acquaintance with Chemistry; such as would impress you with a conviction of the dangers of having recourse to the antidotes that have so long been employed; such as would put you in possession of the capability of selecting antidotes upon acknowledged and established chemical principles; and such as would qualify you to seek in your own resources, agents that may be demanded by any new case, that the progress of criminality or the inventive genius of depravity may bring under your care. To this subject I shall, however, more fully revert, when considering it in its connexion with medical jurisprudence.

There are perhaps some among you, who meditate that association with the profession, which our laws regard in the light of the *tradesmen* of the science; the apothecaries, the compounders and venders of medicine. To such, the services and the benefits derivable from a practical intimacy with Chemistry, must be too obvious to need comment, for if it be incumbent on the physician and general practitioners to be familiarized with this science, the daily occupation of the apothecary must exact from him a much more intimate knowledge of Chemistry. In social life, companionship supposes an acquaintance with the habits, dispositions, and characters of associates; in mercantile employments, the sale of commodities implies a knowledge of the nature, origin, texture, and value of the materials; so with apothecaries, who have the preparation and the sale of medicines; we cannot suppose them to be ignorant of the sources, the composition, the value, and the uses of the several substances they are daily engaged in preparing and vending, in all their different forms, not only for its usefulness in a lucrative point of view, but also in common with those cultivating it as a branch of polite education, and with those studying it as a part of the science of medicine: the exclusive apothecary will be led to look upon Chemistry as one of the most pleasing departments of philosophy, as a science which instructs in the darkest mysteries of nature, which unveils the secret operations of the universe, and which gives to man the satisfactory power to

> " Exult in joys to grosser minds unknown,
> A wealth exhaustless, and a world his own."

By reflection on the various circumstances I have thus cursorily brought under your review, you will coincide with my opinion of the importance of chemical science to the scientific and practical physician. Such conviction may, perhaps, be deemed unnecessary,

because the *regulations of the corporate institutions* have already prescribed it as a part of the system of medical education; and, that you are therefore compelled to attend lectures upon the subject. Gentlemen, I am opposed to that attendance which is given in mere obedience to the prescriptions of chartered corporations. Attendance given solely for the purpose of gaining certificates is most profitless, deceptive, and prejudicial. I would have you study science from a love of it. By such an impulse your progress will be guaranteed. I would, moreover, entreat you, not to be deterred in your attempts to cultivate the science, because it may appear almost impossible that you could attain the highest amount of knowledge of it. The vulgar error, that, because you cannot acquire the maximum degree of philosophical wisdom, you must, on that account, despise the smaller quantum, is exceedingly dangerous in its practical application. It seems a strange perversion of reason, a singular prejudice to estimate lightly, or even to contemn a little learning, because we cannot be possessed of the fullest amount. Indeed, it would be equally ridiculous to consider a little learning valueless or even dangerous, as to talk of a little health, a little prosperity, a little wealth, or a little of any other desirable possession, being worthless or dangerous.

To abjure any degree of information because we cannot grasp the whole circle of the sciences, or sound the depths of erudition, appears to be about as rational as to shut up our windows, because they are too narrow to admit the full glare of noonday sun, or because the glass has not the magnifying power of the telescope. The smallest quantity of knowledge deserves our thankfulness, if fate deprive us of the opportunity of accumulating a larger portion; but whilst the possibility of further advancement remains, we may be as proudly discontented as may be with a little learning; for as with the diamond, so with knowledge, its value increases according to its magnitude in more than geometrical ratio.

To acquire this enviable fund, much exertion, much labour, a parsimonious care and skilful disposal of time, a systematic arrangement of study, and an ambitious desire for intellectual improvement, are highly requisite. A feeling still more honourable than that anxiety for reputation, which impels the generality to such application, must enter into the motives of every man, who successfully devotes himself to mental distinction in this department—*a desire of knowledge for its own sake.* For science is a proud mistress, that will not be courted for the hopes of worldly profit by her dowry, nor for the ambition of being allied to her family, nor for the wish of displaying her in public without the passion and devotion which must be entertained for her sacred self; these once felt and evinced, the suitor watches her smiles with as much eagerness and overwhelming anxiety, as avarice watches the fate of its lottery ticket, whilst the richest prizes yet remain in the wheel. With sincere hopes that such eagerness and enthusiastic desire may gain for you this honourable alliance, you may feel assured, that exertions, on my part, shall not be wanting to excite the necessary ambitious solicitude in your minds.

CIVIL AND RELIGIOUS OBEDIENCE. THE DISSENTERS AND ESTABLISHMENTS.

ESSAY III.—*Continued from page* 100.

WHEN Mr. Childs was cast into prison, and the Dissenters had, much to their honour and credit, taken cognizance of the oppression to which he was subjected, and brought the case before the House of Commons, some of the local established sect attempted a vindication of their conduct through the press; and, amongst other attempts, an article appeared in the St. James's Chronicle, of May 28th, 1835, with that view; abusing Mr. Childs and his friends, as is the habit of all sects in power towards those, who call in question the exercise of that power.

It was concluded that this article was written either by Archdeacon Glover, or Mr. Robert Cobb, his sub-curate; because the extract from it was printed for separate distribution, and the latter gentleman enclosed one of the printed extracts to Mr. Robert Childs, as sufficiently establishing, he said, the duty of civil obedience, and informing him (Mr. Childs) that the case of Daniel, to which allusion had been made, he would find considered in the first paragraph.

We print the extract here because we intend to show the weakness of strong men, when they have a bad cause, and the abusive style of the clerical grand-children of that lady, whom they delight to call by very bad names; and by one, in particular, which is anything but descriptive of the purity of their own ancestry.

Here is the extract:—

"THE BUNGAY MARTYR—CHURCH RATES."

Extract from the St. James's Chronicle, May 28th. 1835.

"If Mr. Childs holds the worship of the Church of England to be not merely indifferent, but positively sinful, there may be something in his notion that it is better to suffer than to comply with a rate for its support. But, even then, his analogy of the case of the prophet Daniel would not support this reasoning. Daniel was commanded to alienate himself wholly from his God; a command which, of course, no pious man could obey; but we do not find that Daniel made any effort to resist the civil government, idolatrous as it was, during the long period that he 'prospered in the reigns of Darius and Cyrus the Persian.' 'But a greater than Daniel is here.' If Mr. Childs will turn to the 12th chap. of St. Mark, 13th and following verses, he will find the question of cheerful obedience satisfactorily disposed of by the very highest authority, and in a case where it was put, as nearly as possible, under the same circumstances of factious hypocrisy under which it is now agitated.

"'And they sent unto him certain of the Pharisees (Dissenters)

'and of the Herodians (a political faction without religion) to catch 'him in his words. And when they were come, they say unto 'him, Master, we know that thou art true, and carest for no man; 'for thou regardest not the person of men, but teachest the word 'of God in truth; Is it awful to give tribute to Cæsar, or not? 'Shall we give, or shall we not give? But he, knowing their 'hypocrisy, said unto them, Why tempt ye me? Bring me a 'penny that I may see it; and they brought it. And he saith unto 'them, Whose is this image and superscription? and they said 'unto him, Cæsar's. And Jesus answering, said unto them, 'Render to Cæsar the things that are Cæsar's, and to God the 'things that are God's; and they marvelled at him.'

"The Pharisees and Herodians of our day may possibly find it as difficult as their predecessors did, to understand the duty of abandoning all hypocritical religious pretences, as an excuse from the discharge of civil duties. But, there is the doctrine pronounced by lips that never erred, and illustrated by the example of him, who came into the world to teach us how we ought to live here, and to die for us that we may live for ever.

"In the 17th chapter of Matthew, and 24th and following verses, we find the proof of our Lord's practice.

"'And when they were come to Capernaum, they that received 'tribute-money came to Peter, and said, Doth not your master pay 'tribute? He saith, Yes; and when he was come into the house, 'Jesus PREVENTED him, saying, What thinkest thou, Simon? Of 'whom do the kings of the earth take custom or tribute? Of their 'own children, or of strangers? Peter saith unto him, Of strangers. 'Jesus saith unto him, Then are the children free; nevertheless, 'lest we offend them, go thou to the sea, and cast a hook, and take 'up the first fish that cometh; and when thou hast opened his 'mouth, thou shalt find a piece of money; that take, and give unto 'them, for me and for thee.'

"As Michaelis has shown to all who will take the trouble of inquiring—and men, who set their consciences above the law, are at least bound to inquire whether their consciences do not mislead them—this tribute, thus obtained by miracle, and thus cheerfully paid, was a gift to the Roman government—a gift sure to be expended in tyrannical aggression, in sensual luxury, and sacrifices to Jupiter, and all the other 'obscene Driads' of pagan polytheism —not, as a church rate is, on what Dissenters believe to be essentially the true, though in details perhaps erroneous, worship of him, whom Churchmen and Dissenters acknowledge, alike, as the true God.

"There is the doctrine of cheerful obedience to the law, plainly laid down by text and precept, by divine authority. Let the Dissenters make the most of it; but let no man tell us that a submission to punishment, which defeats the purpose of law, is an obedience to that law either cheerful or reluctant. The imprisonment of all the Dissenters in Bungay would, in no respect, protect the church in that town from dilapidation, or carry on its services. But to protect the edifices from dilapidation and to carry on the

services of the church, is the end of the church-rate law. We confess, that we cannot altogether repress a feeling of strong disgust, when we find the names of religion and conscience brought into connection with such miserable pettifogging. Stupidity is the only palliation for such profane abuse.

"And now one word more upon the subject of rates generally. It is a mistake to suppose that a rate is ultimately imposed by a parish vestry; the ultimate imposer of the rate is the law, which requires that the edifices of the church be kept in repair, and that certain expenses of carrying on public worship shall be, without interruption, defrayed. All that vestries have to do in the matter is a purely ministerial act—the apportionment of the necessary sums to the necessary purposes; an act, which the law, through its organ, the King's Bench, will infallibly enforce, by the imprisonment of churchwardens, upon neglect. In the discharge of a merely ministerial duty, however, conscience can have no share; yet very tender consciences may, perhaps, restrain Dissenters from attending vestries, to impose church rates; but surely no man's conscience can require of him to perplex and embarrass others in the discharge of a duty, which must be executed.

"To conclude: by the removal of Sir R. Peel's government alone, has been delayed an arrangement that would remove all ground of complaint whatever on the score of church rates. The present clamour is raised by the very persons who caused Sir R. Peel's retirement. Can it be doubted then, that a bitter, aye, and a sordid and interested hatred of the church, lies at the bottom of this clamour? We own that we are not sorry that this hatred manifests itself with so little decency, for already has it drawn to our side the great body of religious nonconformists; and we doubt not that the defensive spirit which now animates all really religious persons in this country, will find a means of organised consolidation, enabling it to resist all the attacks of the enemies of the gospel and the church."

The hearers of the established clergy, if they are at all acquainted with the Scriptures, and are in the habit of reading them for themselves, cannot read this extract, and not see how ignorant and how bold must those men be who hazard such assertions, and so quote the Scriptures in support of a system, which compels one man to carry another to church.* We say carry another to church, because the experiment has often been tried upon Church-of-England parsons, and when the rate has been refused by the Dissenters, the lecture has been withheld, and the building shut

---

* When examining controversial writings, particularly when examining the writings of established clergymen in defence of their right to retain the grip which the law has unjustly, and therefore unwisely, given to them, it will be found useful to collect and heap on one side their abuse, and then generally a very small residuum of argument remains. The writer charges his neighbours—

With "factious hypocrisy."
With "hypocritical religious pretences."
With "miserable pettifogging."
With "stupidity."

up. We now proceed to examine the argument raised in this paper.

"If Mr. Childs holds the worship of the Church of England to be not merely indifferent but positively sinful, there may be something in his notion, that it is better to suffer than to comply with a rate for its support. But even then his analogy of the case of the prophet Daniel would not support this reasoning. Daniel was commanded to alienate himself *wholly* from his God. [May he lawfully alienate himself *in part*, and if yea, how much?] A command of course no pious man could obey."

In the first sentence, the writer cuts his own foundation away, for he admits *that* for which Dissenters contend, namely, that in religious matters, what a man thinks sinful ought not to be enforced upon him, or, to use his own language, "if Mr. Childs holds the worship of the Church of England to be not merely indifferent, but positively sinful, there may be something in his notion." If there was "something in his notion," why did he not show what that something was? This mode of expression is evasive—it gives the argument the slip under the pretence of dealing with it. It matters not to the argument, whether Dissenters hold the worship of the Church of England to be positevely sinful, or merely indifferent—the point is, not whether the worship of that church is good or bad, but whether that sect is religiously justified in compelling Dissenters to pay for its worship. It matters not, whether they think its worship indifferent or sinful, has the Established sect a right to infringe upon the religious liberty of Dissenters, and to compel them to pay for their worship?

It must be perfectly indifferent to Dissenters whether the clergy live in large houses or small ones, but very important if they get a law, establishing their right to pay the rent out of other men's pockets; and the real question would be, not whether particular individuals thought it indifferent or not, but what equity could be pleaded in favour of such an imposition.

Men are not called upon to establish their right to justice; those who claim privileges must justify or yield up the inequality.

But to take the proposition in its terms, it concedes the whole question. On the subject of the worship of God, it affirms that what a man thinks wrong it is *sinful* in him to offer, and, for the same reason, it is wrong in another to compel.

The Dissenters have now, for centuries, given the best evidence of their religious sincerity by their unbought zeal and regular voluntary contributions for supporting the worship of God, and educating

---

With "profane abuse."
With "clamour."
With "bitterness."
With "a sordid and interested hatred."
With "having little decency."
He calls the principal sufferer, in derision, "The Bungay Martyr."
And his friends, "pharisees," and "a political faction."
And lastly, charges them with being "ENEMIES OF THE GOSPEL."

the children of their poorer brethren and countrymen, notwithstanding they are compelled to contribute one half of the many millions of money, which is the annual cost of the law church and its heavy hierarchy.

The extract proceeds thus—"The analogy of the case of the prophet Daniel would not support his (Mr. Childs) reasoning. Daniel was commanded to alienate himself wholly from his God; a command, which of course no pious man could obey."

This statement of the command is not correct; Daniel was not commanded to alienate himself wholly from his God, nor to offer worship to other Gods; the command was, to *abstain from prayer for thirty days:* But if it were correctly stated, it would not affect the question.

The question is, whether Daniel was or was not justified in resisting the law of the land, when that law presumed to interfere with his religious opinions and worship; that is, was he bound to yield his religious rights to his civil duties.

Daniel was chief minister, and the scriptures informs us, that "all the presidents of the kingdom, the governors, and the princes, "the councillors, and the captains, had consulted together to esta- "blish a royal statute, and to make a firm decree, that whosoever "shall ask a petition of any god or man for thirty days, save of "thee, O king, he shall be cast into the den of lions. Wherefore "king Darius signed the writing and the decree."

It will be observed, that the king, lords, and commons, made the law: its sufficiency, as a civil enactment, was therefore perfect.

Now what was Daniel's conduct? According to the reasoning of those who contend for the supremacy of civil over religious obligations, he ought to have obeyed the law of the land.

In the case of Shadrac, Meshac, and Abednego, his friends, they were commanded to commit idolatry, to worship the golden image. In the instance of Daniel, he was commanded merely to *abstain* from prayer for thirty days; it is important to notice the distinction, for it shows, that the scriptures oppose civil interference with religious opinions or worship in *any degree.*

Now read the conduct of Daniel.—"Now WHEN DANIEL KNEW "THAT THE WRITING WAS SIGNED, he went into his house, and the "WINDOWS BEING OPEN in his chamber towards Jerusalem, he "kneeled upon his knees three times a day, and prayed and gave "thanks before his God as he did aforetime."

The particularity and the strength, with which this case is stated, show, that, when the law of man stood opposed to his religious liberty and duty, that is, when it stood opposed to what HE THOUGHT to be his duty to God, the law of man was in his mind as dust in the balance. The case stood simply upon the clear and admitted law of the land on the one hand, and, *at the time of his refusal*, his own opinion of his duty to God, as opposed to the law of the land, on the other.

For this refusal to yield civil obedience, Daniel was cast into the den, and was therein miraculously preserved by God.

Daniel was, as his friends were, in high authority under the king, and if there is any force in that argument which would require the submission of the religious right to the civil obligation, and, if the principle of that argument had had any weight in his mind, he, as chief minister, was especially bound to render obedience. But he did not confound things essentially distinct; he could distinguish his duty towards God, from his duty towards his fellow men, and give to each its just weight.

It will not be contended that God miraculously interposed to sanctify an example, which his people are not to follow; or why were those examples given? Why were the prophets raised up? For what were they sent? To what end were the scriptures written?

Let the scriptures answer. "All scripture, given by inspiration from God, is profitable for doctrine, or reproof, or correction, or instruction in righteousness. No prophecy of scripture is of any private interpretation.

"For the prophecy came not in old time by the will of man, but holy men of God spoke as they were moved by the Holy Ghost."

For what were they moved to declare the will of God, but that man might obey it? Daniel disobeyed the law of the land because it interfered with his religious liberty. God sanctified that resistance by miraculously interposing in his favour. The heathen king reverenced and obeyed the mandate of heaven, and punished those who had made and enforced the law of the land. Did Darius do right when he hearkened unto man or unto God? When he punished Daniel, or when he restored him to honour and respect? When he promulgated, or when he repealed the law of the land.

God did not work a miracle to sanctify a false principle, and establish an erroneous rule of action.

We have set forth these instances of pagan persecution of religious worship, because the last was adopted, if not put forth, by those chosen men, the pluralist archdeacon, and his sub-curate of Bungay; and, in both instances, in all their circumstances, they illustrate and condemn the conduct of the established clergy towards the Dissenters.

The scriptures are full of authorities against the interference of human laws with religious rights.

Another prominent authority, in the Old Testament scriptures, will be found in the twenty-ninth chapter of the first book of Chronicles, in the instance in which David solemnly invokes the blessing of God upon himself and the people, because he and they had cheerfully and *voluntarily* offered their contributions towards the erection of a house in which to worship. "Moreover, because I (David) have set my affection to the house of my God, I have of MINE OWN PROPER GOOD, of gold and silver, which I have given for the house of my God, over and above all that I have prepared for the holy house. Then the chief of the fathers and princes of the tribes of Israel, and the captains of thousands and of hundreds, with the rulers of the king's work, *offered willingly.* Then the

people rejoiced, for that they offered willingly, BECAUSE WITH PERFECT HEART THEY OFFERED WILLINGLY TO THE LORD: and David the king also rejoiced with great joy. Wherefore David blessed the Lord before all the congregation: and David said, Blessed be thou, Lord God of Israel our Father, for ever and ever. O Lord our God, all this store that we have prepared to build thee an house for thine holy name cometh of thine hand and is all thine own. I know also, my God, that thou triest the heart, and hast pleasure in uprightness. As for me, IN THE UPRIGHTNESS OF MINE HEART I HAVE WILLINGLY OFFERED ALL THESE THINGS: and now have I seen with joy thy people, which are present here, to offer WILLINGLY unto thee."

The royal psalmist, it will be observed, hopes for the blessing of God because of the willingness with which he had offered, and upon that ground only.

It is the free-will offering that he expects will be acceptable to the Most High.

Suppose that, when thus pouring out the expression of willing, and therefore pious, worship, and founding his hopes of God's favour upon his having set his affections upon the house of his God, he had added, "and I have cast into bonds and into prisons those whom thou hast not yet enabled to see with my eyes, and to worship after my pattern;" how could we reconcile his conduct with his prayer?

If David and his congregation had passed a law, that strangers and foreigners should erect that temple or be cast into prison, could they have offered up this prayer? or, if blind or wicked enough to have done so, would they have deserved a blessing?

Let those who vote that church rates shall be paid by Dissenters, imagine this solemn and impressive sanctification of the voluntary principle read in their churches, themselves on their knees before God, repeating the pious thanksgiving and prayer of David, yet refusing even to repair of themselves the house they had dedicated to his worship, and having cast their fellow-men in prison, for not contributing to maintain their altar, what would be the response befitting mockery so solemn?

Men who can so act, and that upon reflection, may be fitted for membership with a church established by human laws, but who can say they are worthy members of the church of Christ?

The scriptures abound in commands to avoid idolatry or false worship, and with instances of the judgments of God against those guilty of either; but no command will be found in them to compel men either to offer to, or to erect altars for, other men's worship.

Our Lord hath declared that "THE TRUE WORSHIPPER SHALL WORSHIP THE FATHER IN SPIRIT AND IN TRUTH;" and the reason of that command is given and sanctified by the same authority, in these words, "FOR THE FATHER SEEKETH SUCH TO WORSHIP HIM."

Compulsory worship is not the worship of the spirit, or of truth.

The Old Testament accords with this express command of the

Messiah in the New. All its threatenings and its promises, its punishments and its blessings, are placed upon these grounds.

The printed extract proceeds thus: "We do not find that Daniel made any effort to resist the civil government, idolatrous as it was, during the long period that he prospered in the reigns of Darius and Cyrus."

Here again the subject in debate is mis-stated, and the misstatement such as to lead to a false inference.

The Dissenters do not disturb the civil government, but it is the imposition of the established sect upon the Dissenters, which disturbs them. Just as well might the widow Ryan be charged with creating a disturbance, when she invoked justice upon the murderers of her son.

That is the cause of a thing without which it would not be.

The established sect will not walk humbly before God, but insist that their costly trappings shall be paid for out of the Dissenters pockets; hence the disturbance.

Government is foolish enough to sustain one sect in the situation of the old man of the sea in Sinbad's voyages. They have placed this one sect upon the shoulders of the others.

The Dissenters simply say, "Get off," but they answer, "No, our surplice is dirty;" and the Dissenters naturally reply, "True—wash it, make it clean, *but pay the laundress.*"

This is not, on their part, disturbing the civil government; but it is the government disturbing their religious liberty, by foolishly placing them under the episcopal sect; thus making that sect lose the use of its legs, and grow rubicund and unhealthily fat.

It is a process by which the one half of the people is worried and weakened, and the other half corrupted and hardened.

When the writer of the article informed his readers that he did not find that Daniel made any effort to resist the civil government, he affected to have been on a search for that which, had he found it, would have had nothing to do with the argument, and he must have speculated upon the ignorance of his readers, in risking this assertion, and have drawn largely upon a quality rather beyond boldness. We assume he read the case before he decided and wrote upon it; and he must, therefore, have been aware that Daniel, when he knew that the decree was signed, went into his house, and the windows being open, BOLDLY DID THAT WHICH WAS PROHIBITED BY LAW; AND THAT GOD HAD APPROVED OF HIS NOBLE RESISTANCE. He knew that Daniel was restored to his honours; and that the heathen Darius did not reject or pervert the inference, raised by the miracle of God, but declared that "THE GOD OF DANIEL WAS THE LIVING GOD, AND STEDFAST FOR EVER, AND HIS KINGDOM THAT WHICH SHALL NOT BE DESTROYED." He did not say this of the church then established by law, but of the principle which God had then miraculously sanctified.

The heathen did not venture so far in support of his idolatry, as a parson in 1835 ventured in support of the claim to make others pay for his law church.

(To be continued.)

A PHRENOLOGICAL ACCOUNT OF JAMES C. B. HAWKINS.

Concluded from page 119.

The Editor of the Phrenological Journal having appended a note (vol. 7. page 26.) to the foregoing account of my beloved child, in which note he has hazarded various assumptions, which have no foundation in fact, nor are legitimately deduced from the account, when carefully considered; it becomes necessary that the note should be analyzed, and the real facts of the case stated.

In doing which, I beg it to be distinctly understood, that I impute no blame to the editor of the Phrenological Journal, knowing that his professional and domestic duties can leave him but little time for reviewing the numerous papers which come into his hands as Editor, his reviews, therefore, must, in the nature of things, be superficial, and be tinctured by his own preconceived opinions. And it is no disparagement to the editor, that he can give only a superficial attention to the papers, which he is called upon to review in a hasty manner, perhaps while the printer is importuning him for copy, and reminding him that publishing day is near at hand; the wonder is, that he can afford so much time and talent as is obviously devoted to the editorship of that valuable periodical, without making too great an inroad upon his private duties.

Thus evincing my kind feeling towards the editor, I shall remark on the objectionable points, in the order in which they appear in the note.

The first point that calls for observation is, that my paper "states the temperament to have been sanguine, (and, we presume, highly nervous.") To this I reply, that my judgment of the temperament being decidedly sanguine with a slight dash of the bilious, was derived from observation, and from carefully comparing the child's appearance with Dr. Spurzheim's description of the temperaments.

Dr. Spurzheim says, that "the sanguine constitution is distinguishable by moderate plumpness of person, and tolerable firmness of flesh, light hair inclining to chesnut, blue eyes, fair complexion, great activity of the blood vessels, and an animated countenance:" (see "Outlines," page 5, paragraph 3,); all which points were exactly those of the child in question; and he had not any appearance, described by Dr. S. under the nervous temperament, or the lymphatic; and very few of those under the bilious. A lock of his hair, which I now produce, will confirm my statement as far as concerns that indication; and it would almost imply an inclination towards the lymphatic, but there was no other lymphatic symptom. His was the insinuating, warm, and persevering activity of the sanguine: and not the forcing, cold, and abrupt activity of the nervous constitution.

The note proceeds, "but adds no symptom of a state of bodily constitution which would, to a phrenologist's eye, indicate over activity of brain. We may further presume, that the rest of the body bore no proportion in maturity and strength to the head."

This presumption is not borne out by the fact. The child was above the ordinary size and strength of his age, which was manifested in a remarkable manner the day before his death; he was riding in a coach opposite a boy of fourteen, apparently of ordinary health and strength; the two boys playing together, each strove to hold the other in the opposite seat, and mine, although only seven and a half years old, confined his antagonist much more frequently than the other was able to confine him; to the very great amusement and astonishment of our fellow passengers and myself.

It was during this exercise that he began to complain of a sore throat, and the next day he died of the croup, twenty hours after he went to bed.

At line twenty, the writer says, that "it is the doting parent, not the precocity, that kills the child. We anticipated, before we had proceeded far with the narrative of young Hawkins, that his death would be recorded before the end of the paper; almost the whole of the child's brain was kept in a constant state of premature excitement, and exhausting exercise; for two or three years, every one of the many talents which he manifested was encouraged and drawn out to the uttermost, from the laudable but sadly mistaken motive of giving such wonderful powers every facility to develop themselves; the kind parental guide all the time unconscious that the premature exertion of each and every talent is but another word for the useless expenditure of nervous influence, and the exhaustion of brain. Muscular exertion and air appear to have been neglected; appetite, as is stated, was weak; and early death followed."

In reply to the gratuitous assumptions of this quotation, I have to state, that they are almost all directly the reverse of the facts; and on a careful reperusal of the narrative, I do not find them warranted by any thing therein contained.

The child's brain was *not* "kept in a constant state of premature excitement and exhausting exercise for two or three years;" and that it was not so kept, might have been deduced from the facts stated; as for instance, the narrative says, that "after wasting much time in the fruitless endeavour to teach him the names and forms of the letters of the alphabet, and wondering that so very intelligent a child should yet be so dull, I pondered the subject well, and saw the gross absurdity of attempting to teach a child the letters, independently of their use, and concluded, that the alphabet ought to be placed at the end, rather than at the beginning of the primer.

"I then began at once to spell and read to him, without requiring him to *commit either letters or words to memory*, but directed him to look at that part of the book to which I pointed, and repeat after me.

"His progress in learning was now so rapid, that in a few months, when little more than three years of age, he would take such words as Nebuchadnezzar, Belteshazzar, &c. and spell them for mere amusement; and in a few months more, when only about three and a half years old, would read the historical parts of the Bible with so just a feeling of the sense, that he generally placed

the emphasis in the right place, and rarely had to spell a word, however long or difficult."

Now the fair inference from this account is, that he was not set to *study* spelling or reading; and such was the fact; for, as stated, I spelled and read to him, and from that mode of proceeding he learned to spell and read; and he generally learned to spell the word by my once spelling it to him, and shewing it to him in a book, and he seldom afterwards forgot it. His reading was principally in little books of his own choice, for his own pleasure, and at his own time. The Bible was never read by him as a lesson, but from the pleasure of the historical information, or as a part of family worship, and my reading to him certainly did not average three hours in the week. There was surely nothing exhausting in all this.

The narrative states, that he learned the names of the thirty-five organs of the brain in little more than an hour. The shortness of the time is a proof that it was not an extraordinary exercise; they could scarcely have been learned so soon by dint of mere study; in fact, he did not study them; he merely read them and went to play, came back in a quarter of an hour and read them again, and so alternated his play and his reading five or six times, and they were rivetted in his memory. It was his own whim to learn them, and also to study their localities on a marked bust. The same may be said of his learning the classes and orders of Linnæus; they were principally learned by him in the fields and gardens, plucking flowers, inspecting the fructification, and asking me questions respecting them. He was never set to study them as a task; for I hold the principle of tasking to be injurious. My saying in the same paragraph, page 16, that "he would amuse himself for many hours together in making rude boxes and boats," ought to have prevented the conclusion, that "his brain was kept in a state of exhausting exercise." Many other passages might be quoted from the narrative, to prove that he was not represented as being exhausted by study; but I content myself by showing how he was treated in that respect. I supplied him with amusing and instructive books, and let him read when and what he pleased. I gave him specimens of minerals, and a nest of drawers for them, and left him to his own choice to look over them, and inquire their names and characteristics. I gave him boxes of geometrical solids, on which the names were printed. I gave him tools of various kinds, to make whatever he pleased. When he gathered a number of flowers, and brought them to me, I showed him how to ascertain the classes and orders of them. On a star-light night he would enquire respecting the stars, planets, and constellations: and I answered his questions. All he knew about chemistry he learned from conversations he heard, and listened to of his own accord, and from experiments shown in his presence. He was not even set to study English grammar, his knowledge of which was acquired by merely reading the grammar over, without committing a single lesson to memory. What he knew of Latin and French, he learned in the same manner, and of his own choice; and it was not until we arrived at Vienna, that I appointed or allowed any tutor to instruct him.

There I engaged for him and myself together, a teacher of the German language, but the child soon left me far behind him; and, as stated in the eleventh paragraph of the narrative, in a year he acquired almost a critical acquaintance with the language and many of its dialects; and, indeed, became my interpreter; and all this without any exertion worthy of the name of study, or the necessity of my having ever to remind him of his lesson.

His knowledge of natural history was derived principally from pictures, from exhibitions, from the fields, and from the information elicited by his own searching enquiries.

In short, he was kept in one continual round of amusement, and never required to study any thing. My system, derived from Pestalozzi, and confirmed by observation and reflection, being very similar to that of the excellent Dr. Mayo, whose admirable work is reviewed in the volume from which I am now quoting my own observations on this most interesting child, page 254. At five years of age I took him on a visit to Dr. Mayo, at Epsom, before the Dr. removed to Cheam.

After the above statement, I do hope that the Editor of the Phrenological Journal will cease to regard me as a "doting parent that kills the child," and then charges the infanticide upon the "precocity," but will allow that my "laudable motives" are not so "sadly mistaken" as he imagined.

I cannot conceive how the notion could arise in the Editor's mind, that "muscular exertion and air appear to have been neglected;" for the narrative says, "that he knew the names, characters and qualities, of almost every tree, plant, and weed in my garden; and delighted in plucking the weeds as fast as they appeared." Surely these things could not be learned without being much in the open air, nor the weeds plucked without muscular exertion sufficient for a child of four years old. The botanical inspection of flowers implies a good deal of running about the fields to gather them; the using of "carpenter's tools for many hours together," supposes considerable bodily exercise before he left London; and in Vienna, his labours in building ships, making anchors, chains, windlasses, swords, scabbards, &c. show the reverse of bodily inactivity. In fine, my declaration, under the head of constructiveness, (page 25,) that "manufacturing was with him a passion," and that "it was painful to him to be idle," ought to have led to a conclusion opposite to that of the editor, namely, that great muscular exertion must have been used, which was really the case.

The truth is, he was a very robust boy; that he took much muscular exercise, in walking, working, playing; in climbing a pole which I erected for him in my garden; in raising himself on his hands upon parallel bars; and in various other gymnastic exercises, the means of which I carefully placed in his way.

The editor says, (page 26) "appetite, as is stated, was weak." Under the term gustativeness, in the phrenological remarks (page 25) it is said, "he was very moderate in the quantity of his food;" now I do not think that the expression moderate warrants the idea

that the appetite was weak; in fact, his appetite was always good when in health, but never voracious; the term moderate was used to denote that quantity which is most conducive to a healthy condition of body, and he enjoyed excellent general health, with the exception of a disposition to be costive, which tendency, was studiously and successfully opposed by attention to his diet, avoiding every thing of a binding nature, and giving him food of an opening quality, such as brown bread, gruel, treacle, honey, veal-broth, green vegetables, and a great variety of things of the like opening nature, but rarely administering medicines; his drink was rain water filtered through charcoal, with his dinner; and milk and water sweetened, with his breakfast and tea: and he was never plied with wine or strong drink, as many children are by their unwise parents and guardians.

In reference to the passage in the note, "although there was dissection of the body, there is no account of the appearances from which to infer the cause of death; although we trust still to get some information on this point, which, when it comes, will, in all likelihood, bear out our conjectures:" and, in answer to the editor's enquiries in his letter to the worthy secretary of the Phrenological Society, which were the following: "First, Of what did he die? This is not mentioned. I observed his appetite failed him; did he get the air and exercise which so young a creature requires, or was his tendency to study indulged to the injury of his health? Second, Was the structure of the brain examined, and any thing particular observed? Third, Was the texture of the skull loose and soft, or hard and firm?"

In answer to the above cited passage, and to these inquiries, I have to remark, in addition to what has been said before, as to appetite, health, air, and exercise, that he never had any serious illness but once; when at seven years of age he had a severe inflammation of the brain, which confined him for three months under the treatment of two eminent physicians of Vienna. At one part of the time his life was despaired of, but he finally recovered health, strength, and activity; and at the time we left Vienna, on the 26th of March, 1829, he was deemed by the physicians to be capable of bearing the journey to London in a carriage, travelling only by day, and resting every night. In pursuance of their advice, I hired a very easy carriage and pair of horses to take us direct to Paris; to go and stop, as the state of the child's health should indicate the propriety of the one or the other.

As there was plenty of room in the carriage, I admitted two or three occasional passengers, who added much to the child's amusement; and we travelled without the least fatigue about forty miles a day, sometimes walking for pleasure and exercise. The weather was generally comfortable; but in some deep ravines of the mountainous district, between Lintz and Saltzburg, there was a good deal of snow remaining, which rendered the atmosphere there, rather chilly, and perhaps laid the foundation of the child's illness.

Proceeding in this manner, we reached Munich on the evening of the seventh day of our journey. The child had complained of sore throat on that day, as before mentioned, and he seemed a little

feverish; I therefore determined to remain the next day at Munich and try to cure his sore throat. On our arrival I had him put to bed, wrapped flannel around his neck, and gave him a warm drink to promote perspiration. So far from the attack appearing serious, he was, as usual, attentive to every thing around him, and curious to explore every point of novelty which attracted his notice; at nine o'clock, while the servant was making the bed, he heard the drum, and observed, that "it was not beaten like the Vienna nine o'clock drum, which," said he, "is in this manner;" imitating it with his fingers on the table.

He spent a restless night, and early in the morning I called in a physician, who immediately sent for another; and a surgeon and assistant, under their directions, took about nine ounces of blood from him. Although he had never before witnessed the operation of bleeding, yet he held his arm freely to the lancet, and looked on with all the coolness of an old man well accustomed to it. Twelve leeches were applied to the throat, and the punctures kept open for two hours with warm wet cloths: after which, ten more leeches were placed on the throat, followed by warm wet cloths as before. Mustard plasters were put on the legs, and opening medicine administered; but all these efforts were fruitless; the child died before five o'clock in the afternoon.

On dissection, the only appearance of disease, was inflammation of the larynx, very strong at the glottis; diminishing in intensity downwards, and terminating in an almost imperceptible degree of inflammation at the commencement of the lungs. The heart, brain, and every other part of the body, were declared by the physicians to be in a state of the most perfect health. They acknowledged, however, that the brain exhibited some indications of former inflammation; but the immediate cause of death was, the inflammation of the glottis producing suffocation, by rendering the passage too narrow for respiration.

The brain, the heart, the diseased larynx, the skull, and a cast of the head, are now on the table for the inspection of the society; from which will be seen, that the skull is firm, hard, and free from any marks of disease; and the brain and heart present the appearance of having ceased their operations in a state of perfect health; but the high colour of the inflamed larynx is no longer visible, the part having been preserved in an alcoholic solution of bichloride of mercury.

I have not dissected the brain, but if the society should be of opinion that any new light could be thrown on the subject, by that procedure, I will with cheerfulness have it performed.

In order to enable the society to compare the external development of the organ of language with the corresponding part of the brain and of the skull, I have placed on the table, a bust, which I modelled from the cast, and from memory shortly after death; in which the eyes so strongly resemble the original, that, on shewing the miniature copy of the same in ivory, now also on the table, to numerous friends at Vienna, a year or two after the child's death, those who had known him, without a single exception, picked it out as his likeness, from among several ivory miniature busts, with

which it was always exhibited promiscuously, as if it were a copy from the antique, as the others mostly were.

My object in answering the searching queries of this indefatigably exploring child, on such a variety of subjects, was, to divide his attention, so that none of his faculties should be allowed an exhausting degree of exercise, which might have been the effect of confining him to a few pursuits. And in this mode of proceeding I conceive that I have acted in harmony with the mass of sound recommendation, contained in many papers in the Phrenological Journal.

Whenever a conversation arose in his presence on any subject new to him, no matter how abstruse, he would for days, weeks, and even months afterwards ask questions, ingeniously framed, to procure for himself a systematic view of the thing; and, until his queries were solved, his mind was fretted, and he often dwelt on the point with intense anxiety, reiterating the enquiry in various modifications, until he obtained the satisfaction he so ardently desired.

Few of the statements in this paper rest on my authority; hundreds of persons in London, Rotterdam, Cologne, Frankfort, and Vienna, have repeatedly spoken with astonishment of the extraordinary nature of his enquiries, and of the perseverance with which he strove to procure the information.

It has been said that so precocious a child ought to have been sent into the country among persons of no intelligence, and be inured to athletic sports, in order that his brain might, as much as possible, remain inactive, until the body should attain some degree of maturity.

If the object be to rear an animal, then society, where animal propensity is dominant, would be likely to effect the purpose; but such innate, moral, and intellectual powers as this child possessed, if placed under animal guidance, would in all probability, be perverted without loss of force, and, therefore, an arrant knave of the worst species might result from such injudicious association.

But if the object be to train the child into a man, then the greater the moral and intellectual power, the greater need is there of judicious, moral, and intellectual guidance, for such a mind will make progress of some sort, no obstacles can prevent it; if, therefore, it be not directed into the right way, it will go astray, and proceed in the wrong.

In reviewing my mode of treatment of the child in question, now seven years after his death, and after much discussion at the phrenological, and this society, I really do not see in what I have essentially erred; and I am persuaded, that if providence should place me in charge of such another prodigy, I should follow pretty near the same course with him, being satisfied that my procedure was, in the main, correct.

The Human Body, Essay XII.—*The Liver. The Gall Bladder.*

In the preceding numbers of the Magazine the process of digestion, or, in other words, the *changes*, which the food undergoes

before it is converted into the nutritive principle, was explained. In affording this explanation, the various parts of the *intestinal canal* were described. Of these parts, the *duodenum*, the intestine, continuous with the stomach, was noticed, as receiving by means of a *duct*, or pipe, called the *common bile-duct*, the *bile*, a secretion, made from the blood by the organ, called the *liver*.

The LIVER, called *hepar* in the Latin language, is now to be described: and, after its description, the other viscera, or organs contained within the abdomen, will be described and explained.

The liver is situated in the right side of the body, immediately under and beneath the lower ribs. It extends forwards nearly to the part called the *pit of the stomach*, and backwards nearly to the back bone. It is therefore very large. Its upper surface is convex, being formed so as to be adapted to the shape of the ribs, also to the shape of the *diaphragm* or midrib, the part that separates the cavity of the chest, called the *thoracic* cavity, from the cavity of the belly, called the *abdominal* cavity. Its lower surface is more or less concave; and, attached to this lower surface, is a strong *membranous bag*, called the GALL BLADDER.

The liver itself consists of *two* principal *divisions*, called *lobes:* the right and the left. There are smaller lobes.

These lobes are covered with a fine skin, called *peritoneum*, the same that covers the intestines. These lobes are kept in their places by means of strong bands, called *ligaments*, of which there are several.

The liver itself seems to be a mass of vessels, glands, ducts, and cellular substance, which fastens or binds the whole together.

The vessels, which supply the liver with blood, are two-fold: those which *nourish* the liver, called the *hepatic arteries;* and those, which afford the blood, from which the *bile*, the proper secretion of the liver, is obtained, called the *vena portæ*, dividing into innumerable branches.

These branches, after spreading through the liver in every direction, terminate in little *glandular* bodies, which seem to secrete the bile from the blood; or, perhaps, more correctly, they possess rhe power to form from the blood, brought to them, this secretion, called the bile. When the liver is cut across, the position of these glands, or rather of the small ducts or pipes going from them, is indicated by a number of little points, filled with a yellowish liquid, hence called *biliary pores*.

These little ducts or pipes carry the bile into large pipes, called *hepatic ducts*, which converge, and form *one* large duct, called the *hepatic duct*, which leaves the liver, carrying the bile.

This duct has a branch-duct or pipe connected with it, which leads to the *gall bladder*, into which the bile appears to pass, unless it is needed for the purposes of digestion.

The bile further undergoes some change in the gall bladder. It becomes more concentrated, and *gall stones*, called biliary calculi, are often found in the gall bladder, and seem to be formed from the bile during the delay, which it suffers in the gall bladder.

To be continued.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse*.]

No. 6.] FEBRUARY 1, 1837. [Vol. II.

PHRENOLOGY AND CRIMINAL LEGISLATION, AND CRIMINAL DISCIPLINE.

An Essay read before the Anthropological Society, by John Epps, M.D., *Janunry* 26, 1837.

It may appear strange to many to connect Phrenology with *Criminal Legislation* and *Criminal Discipline*, or, as it is more commonly termed, *Prison Discipline*. How these subjects can be connected with Phrenology will not at first be perceived; but, when it is remembered that Criminal Legislation consists professedly of the *laws* regulating the *education of criminals*, and Criminal Discipline the *practical application* of these laws to the education of the criminal, so as to render him a good member of society, we can then readily understand how Phrenology has a most intimate connexion with these subjects; a connexion, the more apparent, when it is borne in mind, that as Phrenology guides us in the education of children, by explaining and unfolding the peculiar bents and tendencies of their minds, so Phrenology will be equally efficacious in explaining and unfolding the peculiar bents and tendencies of the minds of criminals, thereby enabling us to proceed satisfactorily in their education.

The education, treated of on former occasions, and published in late numbers, was the education of those whom the laws of the country had never branded with the stigma of crime; it was then shown, that education is nothing more than the drawing forth of the faculties of the human mind: that therefore it was necessary that the faculties to be drawn out should be known: that the knowledge which Phrenology affords is the foundation: and that the food, by which these faculties are drawn out must be good, prepared in the proper way, and presented at the proper seasons. And, in conclusion, it was stated as the consequence of such an education, that the promise of the Divine Being would be realized, "Train up a child in the way he should go, and when he is old he will not depart from it."

The education, to be treated of, on the present occasion, is the education of those whom the law has branded with the stigma of criminality; whom the opinion of society has declared as unfit any longer to have liberty to move among the socialities of society: to have lost, by their conduct, the privilege of free communion with their fellow-men.

We have, therefore, to transfer the thoughts upon education of the unstained to the education of the stained.

In order that we may do this correctly, it is necessary that we should understond what a *criminal* is. A criminal is a man who commits a crime, is the answer of one who knows words only as words, and who never takes the trouble to think. A criminal is an individual who violates the laws of the land, says another. In this sense, Luther was a criminal: every quaker, who conscientiously refuses to pay tithe, is a criminal: the first American republicans were criminals. If this definition be correct, every man who resists a bad law is a criminal.

As yet, therefore, we have not arrived at a satisfactory definition of that which constitutes a criminal. Phrenology aids us, and declares that a criminal is one *who subverts the order in which the faculties are arranged in the human head.* Now, knowing that order, namely, that the organs of the moral feelings are placed on the throne, at the upper part of the head, the organs of the intellectual powers in front, and the organs of the animal feelings behind, we have a means of satisfactorily defining what crime is, and at the same time of ascertaining how crime originates, and how the state causing crime is to be removed. And thus phrenology will enable the friend to his race to develop a system of education, which shall so elevate the criminal that he will be rendered fit again to enjoy the socialities of life; again to have free communion with his fellow-men.

A criminal is, therefore, one *who violates the order in which the Creator has arranged the faculties;* is an individual, who places the animal feelings supreme over the moral feelings; and who makes the intellectual faculties serve the purpose of enabling the animal feelings to obtain their gratification.

Taking this wide and this legitimate definition of what a criminal is, I fear that we must acknowledge that all, in one sense or another, are criminals; or, in other language, that "we have all sinned, and come short of the glory of God;" who is infinite moral goodness, acting through infinite intellectual power.

Human legislation, however, does not touch all criminals. It recognizes only some of the most flagrant activities of the animal feelings. The more refined crimes, if such an expression can be allowed, are subject only to the tangibility of a judge, who knows the secrets of the heart.

Sufficient has been stated to show that crime is to be considered an evil; and that its evilness is dependent upon the circumstance, that all crimes and every crime are such, because they consist of subversions of the order which the Creator has established.

Crime would not be crime, many persons think and even avow, unless it were attended with inconvenience. This is putting the criminality of crime on a low basis. Every subversion of the order of the faculties, supposing such subversion were attended with no inconveniences except to the individual criminal, and even not to him, would be crime, just as much as when attended with inconveniences to others.

But as the Creator has stamped his approval of obedience to his laws by conjoining happiness thereto; and, as the subversion of the order of the faculties is a violation of his laws, we must, of necessity, conclude, that every such violation must be attended with misery. And when we know, as we do, that every violation of the physical law is attended with misery, whether that violation is willed or accidentally brought about, (as when a man, knowingly, or a child, unknowingly, takes arsenic,) how much more reason is there to conclude, that the violation of the moral law, or, phrenologically and more specifically, the order in which the faculties are arranged in the human head, must be attended with the most serious inconveniences. A conclusion strengthened much by the fact, that it is by the addition of these moral organs, that man is indebted principally for his superiority over the brute beasts.

The immediate evils, resulting from the violation of the *physical* law, are so great, and are so directly inflicted, that legislation has not turned itself in the direction of punishing such violations. Thus, there is no law to punish a man for breaking his leg, by carelessly walking over ice, or for breaking his neck by riding an unsafe horse. The suffering, in these cases, serves as a punishment. The man, in these cases, inflicts the evil upon himself: but if a man had been engaged in making a place slippery* so that another might break his leg: or, if some dealer had sold a horse, warranted sound and safe, by the unsafeness of which the neck of the purchaser was broken, then legislation interferes, and gives an opportunity for the infliction of punishment by an action for damages.

As society, happy society, is dependent for its existence upon the supremacy of the moral feelings, it is quite clear, that the subversion of that order must be attended with injuries; which, as resulting from the subversion of the order of the faculties, being so great, Criminal Legislation has originated in the desire to prevent those injuries, by means which are comprehensible under the title of CRIMINAL DISCIPLINE.

Now, it is in reference to the laws, constituting Criminal Legislation, and the means, constituting Criminal Discipline, that Phrenology applies, for this will enable the enquirer to demonstrate, that the laws are in their nature, a correct counterpart of the state of the organization of the legislators, and of the people, at the different periods of the world's history; for, it is quite evident, that an individual, endowed with large moral organs, and small animal organs, will view an injury with a very different state of mind from him, who is endowed with small moral organs and large animal: and that the former in devising a means to punish the injuries, will adopt a punishment very different from that adopted by the latter.†

---

* It is pleasing to notice, that the magistrates have, during the present winter, punished those who threw snow balls, or made slides in the public streets. This shows an improvement in the minds of the people: a more tender appreciation of the rights of others.

† Perhaps the most splendid instances ever afforded of this, were the beautiful reproof of Christ to the cruel desire of some of his disciples, who, because certain

Indeed, so much is this and must this be the case, that the phrenologist could predicate, both what the laws will be from the organization of the law makers and of the people; and, what will be the organization from the laws: just as accurately as the linguist will judge of the progress of civilization and the extent of scientific improvement of a people, by the fulness and the precision of the language of that people.

As there has never been, except in the Edenic state, a period in which this order has not been subverted, it is quite evident, that, in all periods of the world's history, Criminal Legislation must have existed.

It would be interesting, therefore, to trace the history of Criminal Legislation, pointing out the changes that have taken place: to connect these changes as far as possible with the changes in organzation: to show that the means of punishment, comprised under the title of Criminal Discipline, have been effectual only when the object is to *reform*, and not to *punish* the offender. Upon these points, however, we have not sufficient phrenological data to enable us to compare the Criminal Legislation of former nations with their organization. Some future day, perhaps, sufficient materials will be obtained: we must therefore wait till then: and the reason, in fact, why this present inability is mentioned is, that, as opportunities offer, individuals may be induced to obtain specimens of the skulls of different nations in the earlier periods of their history: a collection of which would be highly valuable; and which, perhaps, may be realized by means of the ancient catacombs.

As, however, we are not able to enter upon this subject, in its full extent, it is still desirable to show, by a few illustrations, the truth of this proposition: and, therefore, we shall take an early opportunity of entering upon this interesting subject in connexion with savage nations, the skulls of the individuals belonging to which are in the possession of phrenologists.

On the present occasion, the Criminal Legislation and the Criminal Discipline of our own country, will be principally referred to.

In the earlier periods of our history, the legislation for the punishment of crime was not marked by much cruelty. Under the Saxon laws, much care seems to have been adopted to prevent crime, and many means of punishment which would do honour to modern times, were employed.

The feudal system introduced at the Norman Conquest, was conjoined with the most barbarous punishments: the trial by fire took the place of trial by jury: and torture was the scorpion of punishment which superseded the rod of reformatory discipline.

Samaritans did not treat their master with proper respect, wished to call down fire from heaven to destroy them, "Ye know not what manner of spirit ye are of, for the Son of Man is not come to destroy men's lives, but to save them."—Luke ix. 55, 56.

Also, the beautiful spirit of the first Christian martyr, Stephen, who when dying from the injuries inflicted on him by his persecutors, "Lord, lay not this sin to their charge."—Acts vii. 60.

The history of Criminal Legislation, and of Criminal Dicipline, may be reduced, for the purpose of decision, into four periods: first, the period when self-esteem and acquisitiveness awakened destructiveness to call upon the intellectual powers to devise punishment: second, the period when cautiousness awakened destructiveness to similar ends: third, the period when acquisitiveness became operative in thus awaking destructiveness: and the fourth period, when the moral feelings have taken destructiveness, and the other animal feelings, under their direction, and have devised means, by which the reformation of the offender has been sought after. The first period may be designated the *feudal* period: the second, the period of *superstition*: the third, the *commercial* period; and the fourth, the period of *reformation.*

In reference to the feudal period, history is sufficiently explicit to demonstrate the organization of the individuals of that age. The little value attached to human life: the little respect paid to female virtue: the want of attention to the rights of the many: are too well known to need illustration. These states of the mind of the barons would necessarily manifest themselves in the laws which they would establish: and as self-esteem would be the principal organ developed in such individuals, both by their birth and their education, it is quite evident that any injury, any offence offered to self-esteem, would be followed by the infliction upon the offender of the most dire punishment. Look at the blood-stained page of history: read the accounts of the border conflicts; the burning of castles; the laying waste of estates. But the illustration, the most permanent illustration, of the vindictiveness of wounded self-esteem, is to be seen in laws which, mitigated, it is true, but still insulting to manhood and humanity by their severity, are to be found on our statute book. Reference is made to the *game laws.* What cruelties are connected with the history of these laws. For trespassing on the king's forests was death even to men of rank: and to trespass upon the domains of the barons was death to those who were inferior to them. And even now, our hereditary legislators, the children of self-esteem, still gloat in the vindictive delight arising from the tranportation of men, whom they brand with a name, and thereby stigmatize as infamous; namely, poachers.

Besides the severe punishments inflicted by game laws, the following offences were made capital; wilfully breaking down the head of a fish-pond (where the nobles preserved their fish): cutting down an ornamental tree in a garden or avenue: cutting down an apple or a cherry tree in an orchard: cutting down any hop-bines in a plantation: and many others which might be enumerated.

Cautiousness came in and called destructiveness and the intellectual powers into activity, so as to desire punishments, cruel punishments, for those who vexed it, and excited it into activity. Thus laws were passed, punishing with death by burning, and by all kinds of torture, those guilty of the crime of thinking on matters of religion differently from the priests of the day, this crime being called heresy: also those guilty of the impossible crime of witch-

craft. Thousands suffered under these laws; and even Judge Hale, seemed to delight in bringing what were called "witches" to the stake, to the gallows. It was a law, that the boy of fourteen years who kept company with gipsies for one month should suffer death.

Indeed, even now, there seems to be no organ so skilful in exciting destructiveness as cautiousness. The power of this organ, under circumstances of excitation, cannot be illustrated better than the following account taken from *Tait's Magazine (first series)*.

"There was a statute passed in the reign of Henry VIII., by which it was enacted, that persons convicted of poisoning, should be *boiled to death.* The statute was passed under the impulse of strong public indignation, (active cautiousness calling destructiveness into operation,) in consequence of the atrocious crime of a person named Roos, who was cook to the Bishop of Rochester, and who, by putting poison into a pot of broth, part of which was served up to the bishop's family, and the remainder to the poor of the parish, destroyed several lives; though the cogency of the proof on which the charge of so grievous a crime was sustained, few chemists, of the present day, would perhaps vouch for. Sometimes families have been poisoned by accident; as, for instance, by an ill-cleaned copper vessel. However this might be, no doubt of the man's guilt was entertained. The novel and dreadful punishment which he underwent was upheld by a special statute, passed for the occasion, and, of course, subsequently to the commission of the crime; and the *boiling to death* was intended to be a sort of retaliation, because the crime had been effected by *boiling!* He suffered the punishment by a retrospective operation of the act. The sentence was executed in Smithfield. There was the fire lit—the cauldron raised—and the man boiled by Act of Parliament, to the great edification of the people: who, if they learned nothing else from it, learned, at least, atrocious cruelty was a legislative virtue, which the vulgar, therefore, might not be ashamed to practise."

It is curious to find that the bridges over the Thames had specific laws for their protection. Brentford and Blackfriars bridges seem to have offered but slight temptation to individuals to injure them, for to damage them was a *clergyable felony:* but Westminster, London, and Putney bridges, must have had something peculiar about them to excite the organs of destructiveness in the people, for to damage *these* bridges constituted a *capital* offence.

The effect of such legislation was to introduce into the statute book immense number of laws, generated by the animal feelings and the intellect: and Blackstone remarks, that, in his time among the variety of actions that men commit, no less than *one hundred and sixty* had been declared by Act of Parliament to be felonies deserving of death. And between Blackstone's time and the middle of the eighteenth century, *sixty* more were added to the list of capital crimes. Murder was thus legalized.

As men advance in civilization, the animal feelings still having the great preponderance, the organ of acquisitiveness obtains an outlet in the pursuits of commerce, and in the consequent accumulation of wealth. And, therefore, it is natural to expect, that

acquisitiveness active with preponderating animal feelings, would devise means in which destructiveness will delight for the punishment of those who give pain. Hence we find that the following offences, under the operation of these feelings, were made capital: maliciously throwing down, or even partially destroying the rail, chain, or bar, of a turnpike-gate; the wilful breaking, without the consent of the owner, of any tools in the woollen manufacture, (then one of the principal sources whence acquisitiveness derived its gratification); the maliciously cutting or destroying any manufacture of linen, cloth, or yarn, when exposed to bleach or dry.

In connexion with the activity of this organ, and its preponderance in connexion with the progress of civilization, as connected with and dependant upon commercial enterprise, the interesting fact, that this organ is very large in the heads of the Manchester people, so as to give a general character to the head, has been testified to me by a friend, a Manchester manufacturer himself, and a phrenologist.

A few additional illustrations may be brought forward to show the vindictiveness, begotten by acquisitiveness and destructiveness.

In the time of Queen Anne, was passed the first statute, inflicting hanging for stealing in a dwelling house to the amount of 40s. In the reign of Henry I. offences of simple larceny became punishable with death. There was a curious adjunct to this infliction: namely, those convicted, who could read, were allowed the benefit of clergy for the first offence; but those who could not read, and all women convicts, were liable to be transported. Afterwards, the benefit of clergy was allowed to both sexes upon praying the benefit of the statute.

Sheep-stealing was then one of these clergyable felonies: which, strange to say, from the wounded acquisitiveness of some of the agriculturists in the House of Commons, was made, by an act passed in the reign of George II. a capital offence: these wise and calculating gentlemen imagining that a sheep is equal in worth to a man. And as a striking evidence of the distinctness of the intellectual from the moral powers, and the incapability of the intellect by itself to elevate itself into the dignities of the moral feelings, the following quotation from the speech, containing the reasons why sheep-stealing should still be punished with death, offered by Mr. Davies Gilbert, one of the most profound mathematicians of the day, and latterly the President of the Royal Society, is strikingly interesting:—

"Considering the manner in which sheep are, and must be fed on extensive downs, their exposure to depredation, and the difficulty attendant upon the detection of this class of depredators; and considering how much the sustenance and clothing of the people depend upon this useful animal, I cannot but think that whatever alterations may be introduced in other parts of our law, *sheep-stealing* should still continue to be punished *capitally*."

But to show still more strongly the hold, which acquisitiveness had gained in the minds of our legislators, and of the middle class of society, it is worthy of notice that, in the reign of William III. a law was passed, making *privately stealing in a dwelling house*,

or in a vessel, in a canal or navigable river, to the amount of *forty shillings*, or stealing goods in a *shop* to the value of *five shillings*, a capital offence.

In regard to other crimes the enlarged and the increasingly active acquisitiveness gloating for vengeance, exhibited in the increased severity of punishments, can easily be traced.

Thus *forgery*, by the ancient laws, was only a *misdemeanour*, punishable by fine and imprisonment. But, in the year 1728, from some forgeries committed by one Hale, on a Member of Parliament, named Gibson, a law was passed by which the forgery of promissory notes, bills of exchange, and all negociable securities for money, was made punishable with death.

Sir Robert Peel has taken much *credit* to himself for amending and ameliorating the criminal law; and, in reference to some of the offences already referred to, the following were some of these much-praised emendations. Stealing to the value of 40s. was punishable with death: he made it to the amount of £5.: which actually is a sum, compared with the value of 40s. in the time of Queen Anne, less in value: and, therefore, instead of increasing the value of a man's life, he diminished it.

He perpetuated the punishment of death as applicable to forgeries.

An examination of Sir Robert Peel's organization will explain all this.*

We consider that these facts are quite sufficient to show that the organ of acquisitiveness becoming active, an activity connected with a more civilized state of society has, because its growth and its activity have not been connected with a correspondent growth and activity of the moral feelings, called destructiveness, another animal feeling, into activity; and has demanded blood for gold, for silver, for handkerchiefs, for shawls, for knives, and for all the other ceteras which come within the extensive range of the vision of acquisitiveness. In fact, our Criminal Legislation proves the old adage: "Touch a man any where but in his pocket."

Thus it will be seen that the legislation of our own country is the legislation of the dog deprived of his bone: and is found in the animal feelings directing the intellectual powers: it is the legislation of wild beasts in human shape: it is the legislation of the back and front parts of the head and not of the upper parts.

We have thus attempted to show that the history of our country demonstrates that we have had Criminal Legislation guided by the animal feelings: under the baronial or feudal system, self-esteem urging on destructiveness: under the superstition state, cautiousness calling destructiveness into activity: and lastly, under the commercial state, acquisitiveness calling destructiveness into activity.

The game laws, (still existing, and even now disgustingly and insultingly severe,) exhibit the first period: the laws regarding witchcraft and heresy, the second period: and the laws regarding robbery and forgery, the third.

(To be continued.)

* The speech Sir Robert Peel has just delivered at his installation as Lord Rector of the Glasgow University, affords one of the best illustrations of the nature of that organization.

SPINAL DEFORMITIES.

To the Editor of the Anthropological Magazine.

Dear Sir,—In my last communication to your valuable Journal, I gave a description of the whole jointed structure of the spinal column, except the two uppermost vertebræ of the neck, and their connexion with the head. These I reserved for the present letter, but the offices these execute are so numerous, and the machinery required for the purpose so complex and peculiar, that a mere description would be unintelligible to general readers. I shall, therefore, postpone the consideration of these articulations, until explanatory engravings shall have been provided, and proceed to the next article.

OF THE EXTENSIBILITY OF THE ARTICULAR LIGAMENTS.

Having disposed of the anatomy, and general structure of the articulations, and especially of the vertebral joints, except those of the two superior vertebræ of the neck, we have still to consider, the anatomy and the derangements of the various connecting ligaments, which fasten the vertebræ to each other. Attention to these bands is necessary, because they are, I am persuaded, the true links, and only conjoining media, of the articulations, however unlike these may be in form, and external appearance. The bones are not only firmly bound together by them, but so long as their *tone* remains unimpaired, the vertebræ are prevented from vacillating, or sliding out of place. And, I am the more solicitous to draw attention to the duties of these ligaments, since it appears to me, that the offices they perform in the animal economy are neither clearly understood, nor sufficiently insisted upon in practice.

The vertebral ligaments are divided into—

I.—Yellow fibrous ligaments.
II.—White fibrous ligaments.
III.—Capsular ligaments.
IV.—Fibro-cartilages.

I.—THE YELLOW LIGAMENTS,

Are to be found in brutes as well as in human beings. Wherever distributed, they form a conspicuous part in the animal economy. Their elasticity and extensibility are so apparent in the various offices they discharge, that no elaborate statements will be required to prove their power of contraction and extension, either in health or disease. Graminivorous animals are endowed with the faculty of bending their necks to crop the herbage, under their feet: this they accomplish with the greatest expedition and facility. They stoop down and raise their heads, not only without any effort,

but alternate the motions in quick and rapid succession. The ability to execute this series of movements is owing to a large and thick yellow ligament, called vulgarly *pack-wax*, which extends along the upper portion of the neck, from the body of most quadrupeds, to the nape of their heads. A similar substance is placed between the cartilaginous rings of the human trachea, or wind-pipe, in the middle coat of arteries, and in the outer membrane of the corpora cavernosa of the penis.

We have such continual and obvious proofs of the aptitude for motion in the yellow ligaments of all these organs, that no doubt can be entertained of their suitability. The back part of the spinal column, between the plates, is furnished with a series of yellow ligaments, from the second cervical vertebræ to the sacrum. They are twenty-two in number; between the plates of every vertebræ, filling up the spaces between each superior and inferior vertebra. They are strong, flexible, and admit of considerable motion.

II.—THE WHITE LIGAMENTS.

These, under the several appellations of ligamentary bands, tendons, fasciæ, aponeuroses, periosteum, fibrous structure, &c., are largely distributed in the animal economy, and perform various interesting operations. This apparatus deserves our attention on many accounts; and, in particular, that we may learn the mode of junction among the bones, the nature and the uses of each part, and the varying sensibility, with which they are endowed. As my object is to establish the possibility of elongation in these organs under favouring circumstances, I shall extend my inquiries so far only as to elucidate the principle. It is well known that these organs do not readily admit of forcible, and sudden extension. Rather than give way to violence and sudden jirks, they will often resist, and are broken asunder.

1st. This accident is not unfrequent with the *tendo-achillis*, the tendon which is fastened into the heel; which, although made of very strong, and firm materials, is liable to be torn asunder in feats of activity. This calamity actually befel an unfortunate dancing-master, and disabled him from pursuing his vocation. During the performance of some choice and favourite airs, he sprung from the floor, with such an extraordinary bound, that both tendons were actually ruptured, and burst asunder with an audible crack. He fell down on the floor, and was carried away quite helpless. The same misfortune occurs in dislocations of the large joints; although it is not an invariable concomitant, even where the luxation was sudden, extensive, and accompanied with an unusual degree of violence. It is, however, well known, that, although tendons do not submit to hasty efforts, *they readily accommodate themselves to slow and gradual applications.* Of this fact we meet with daily examples in practice. We may illustrate by two.

Example 1.—*Periosteum:* or membrane investing bones. After a fractured bone has been properly set, a callous exudation is thrown out, to rejoin the two pieces, and unite them into a conti-

nuous bony substance. This process is accomplished by means of a glairy fluid, which envelopes the two ends, and, in process of of time, becomes true bone. The viscous fluid surrounds the broken parts like a ring placed over them, and pushes out the periosteum to make way for the deposition. In the same manner a *node*, or other bony tumour, stretches the periosteum, and forces it to make a detour over the projecting bone. Where the swelling is great, the periosteum keeps pace and increases along with it. Sometimes the membrane enlarges to a very considerable size, but notwithstanding the alterations produced in the bone, it is never ruptured, but gradually gives way, and accommodates itself to the acting force.

Example 2.—*The fasciæ and aponeuroses* enclose muscles, and other soft parts, to preserve and keep them from bulging or jutting out, during their contractions. They are extensively distributed over the external regions of the body, more especially of the abdomen, the arms, and legs, which they enclose like a case, or sheath. When parts are either extenuated or enlarged, these organs adapt themselves to the changes going on, yet preserving their natural form, and appearance unaltered. These examples will show the effect of a gradually acting force.

III.—OF THE CAPSULAR LIGAMENTS.

Every joint is furnished with its capsular ligament, which surrounds and incases the articulation like a pouch or bag. Externally the capsule consists of white fibrous materials. Its internal surface secretes mucus; and contains a glandular apparatus, furnishing synovia to lubricate the interior of the joint, and enable the parts to glide easily over one another without injurious friction. Sometimes the capsules are inflamed and distended with pus, or contain an aqueous fluid: occasionally they are enormously distended. On the fluid being evacuated, they gradually contract and recover their natural dimensions. Besides a common capsule, the joints have their white ligaments, running in every direction, to bind and strengthen them. The large diarthrodial articulations are all provided with a numerous and complex apparatus of the same kind, to enable them to execute their varied movements. After hurts, fractures, and dislocations, the joints continue firm and relaxed for a longer or shorter period. When the constitution is delicate, or the limb is too soon or too much exercised, the articular compages or bands remain feeble for a long period. Sometimes the full vigour is never restored. Of this calamity I have, from peculiar circumstances, witnessed numerous examples, during my long residence at Horncastle.

A family, comprising many individuals, dispersed over the wolds of Lincolnshire, were distinguished bone setters. One of the most celebrated regularly attended our weekly market. Cripples applied to him in shoals from great distances, and were often restored to the free enjoyment of their limbs, after they had received no benefit from their ordinary medical advisers. Truth however

obliges me to acknowlegde, that, from his rude treatment, and total ignorance of medicine, and of the very rudiments of anatomy, he frequently inflicted irreparable mischief upon the maimed articulations. On examining a disabled limb, he always declared that either a *guider* (tendon) or small bone was out of its place, and he proceeded accordingly. Suppose the knee to be the affected organ, he appointed two or three stout men to pull at the thigh, and as many to stretch the leg in an opposite direction; when their united efforts had been some time engaged, and in full action, he proceeded with both hands and all his force to compress the joint in every direction, and, as it were, kneaded and moulded it over again. After this process had been several times repeated, the patient was encouraged to move the joint. Although completely helpless before, he was often able to use it freely, and walk about in the room. By adopting this practice, the family acquired, in my opinion, a well-earned reputation; but from their lamentable ignorance of medical knowledge and of the parts acted upon, they often lost the meed of praise, which they would otherwise have received. Scarcely a week elapsed, without an application to the Horncastle Dispensary from some of the disappointed sufferers. I generally found on inquiry, that, from coarse handling and violent pulling, the capsular and other ligaments of the crippled joint were unduly elongated and proportionally relaxed. The articulating bones instead of being firmly in apposition, had receded from one another, and separated beyond their natural limits. In most of the above cases, I was led to believe, that from some violent stroke or hurt, the bones had been partially disjoined, or subluxated, and that the means employed restored them to their places. So far the practice was excellent, and highly meritorious, but acting as the bone setters did, without cautious selection or careful discrimination, mischievous consequences frequently ensued. The great force employed sometimes overcame the cohesive texture of the parts, and the unhappy patients were rendered sufferers for life. Nor was this the only misfortune that attended the practice. For want of proper discrimination, they confounded scrofulous and other constitutional diseases, with luxations of the joints. Although it must be acknowledged, that they often made splendid cures, their success was lessened by limiting their remediable indications to a single method. Many of these ill-conducted cases came at last under my professional management, especially among the poorer classes. After their rude interference, I have found the head of the humerus hanging below the cavity in which it articulates, called the *glenoid* cavity, and, in other instances, a palpable separation between the bones of the wrist. The knee and ankle joints also suffered much, and from the same cause. I have brought forward these examples not with any desire to blame, but merely to show, that the articular capsules and ligaments will give way to force, and admit of elongation. The capability of stretching and of extension is striking and convincing with regard to the hip joint. When the thigh bone has been fractured in its neck, and within the capsules, it is very seldom re-united. In that case, the

action of walking, and of pressure, made upon the hip joint, tends gradually to extend and draw out the articulating compages, which lengthen more and more through the remainder of life. Of this disposition in fibrous structure, I have met with numerous examples. One will suffice.

A gentlemen, residing within my professional circuit, upon the wolds of Lincolnshire, was, while in the act of springing to mount his horse, pulled forwards by the animal, and broke his left thigh bone within the socket. The attempt at re-union having wholly failed, he resumed his walking exercise, at first with little difficulty or lameness. When I first knew him he rather limped, and could not place the sole of his foot flat upon the ground. During an acquaintance of twenty years, I observed that the great trochanter continued slowly to ascend and the limb to shorten. The accident happened when he was in excellent health, and about fifty years old. Life was prolonged to eighty, and, before arriving at that advanced period, he could scarcely touch the floor with the tips of his toes.

IV.—A CARTILAGINOUS BODY,

Placed between the vertebræ fastens them together, and enables them by its compressibility to give way in every direction. When the pressure is removed, these cartilages expand to their former dimensions. This elasticity is rendered strikingly apparent by the fact, that they are thicker on rising from bed than at night, after the exertions of the day. They yield more and more during the erect posture to the inflections of the spine, and their external surface becomes prominent, and juts out towards the side where the inflection is made, the cartilages being of course more compressed in that direction. They likewise give way on all sides, without any spinal inflection, to the superincumbent weight of the body. This is done by small, and imperceptible degrees. They restore themselves again by their elasticity, on being merely freed from compressions. So a man is really taller after a night's rest, than after he has carried a burden, or been upright for a length of time. The simple and natural reason for this difference in height is occasioned by the expansion, and the condensation of the intervertebral cartilages, produced by the posture of individuals.

Although the motion between any two vertebræ is only small, yet the combined movement is considerable. This is owing to the peculiar formation of the cartilages, which are composed of flexible and compressible materials. Their outer layer is comparatively hard, but the centre lamina consists of a soft, glairy fluid, which readily gives way to the incumbent weight. By means of this arrangement, the vertebræ are placed as it were upon a pivot, and are made to perform at pleasure their varied and extensive motions backwards, sideways, and forwards.

Having, I think, proved incontestibly, that all the articulating ligaments will stretch and give way to force employed, I might here conclude the inquiry by saying, if the jointed apparatus be ductile,

and suffers elongation in one set of articulations, it will in all the rest. It is not, however, my intention to confine my arguments to analogical evidence. I shall, in commenting upon the deformities of the back-bone, show by demonstrative testimony, how the capsules and fibrous bands, surrounding the vertebral articulations, are, in these instances, severally impressed and affected. Having succeeded in establishing the extensibility of these organs, I shall, I think, have no difficulty to introduce a new and better notion of spinal complaints.

I can declare as my deliberate opinion, that when vertebral articulations are better understood, in their healthy and morbid condition, spinal diseases will be rarely met with; and, when they do occur, will be speedily overcome, by the means that I shall describe for that purpose. Hitherto the faculty have followed a devious path, and, grown old in error, are very unwilling to retrace their steps. They have pursued an ignis fatuus, which has misled and deceived them. However reluctant to see the true light, they will nevertheless be obliged either to admit its rays, or be left to pursue their solitary course, unheeded if not despised.

EDWARD HARRISON, M. D.

Holles Street, Dec. 1836.

A FEW WORDS ON SEVERAL SUBJECTS.

Commerce and Taxation.—The people should beware of the aristocrats, who would be glad now to stir up a war. The errors of the good-meaning men, and the blunders of the thick-headed, will be readily laid hold of by the peerage and the tories, to divert the people from setting the House of Peers in order.

The aristocracy and the money-ocracy have each, as a general rule, a branch of their tribe belonging to each party,—thus the partners in most of the banking houses take opposite sides, that they may, through the one or the other, secure for the concern facilities through and with the government, which ever of the two parties are in. Tax-eaters and paper-money madmen are both evils to be avoided by the people. Thomas Attwood would maintain that one pound notes would make us prosperous,—as though it were possible to create something out of nothing,—substance out of a shadow,—and the lords would thank the Lord, if by any means they could induce us to raise their rents, and put off the day of reckoning. Peace will assuredly throw them on their backs.

House of Commons.—Although the conduct of the lords has given the people an object against which to act, the day cannot be far distant when it will be seen that six hundred and odd persons cannot form a working body,—it is in the nature of things that such a number should talk too much, and debate themselves into confusion.

CIVIL AND RELIGIOUS OBEDIENCE. THE DISSENTERS AND ESTABLISHMENTS.

ESSAY IV.—*Continued from page* 148.

The article thus proceeds: "If Mr. Childs will turn to the 12th chapter of St. Mark, 13th and following verses, he will find the question of cheerful obedience satisfactorily disposed of by the very highest authority, and in a case where it was put, as nearly as possible, under the same circumstances of factious hypocrisy under which it it is now agitated.

"'And they sent unto him certain of the Pharisees and of the 'Herodians, to catch him in his words. And when they were 'come, they say unto him, Master, we know that thou art true, and 'carest for no man; for thou regardest not the person of men, but 'teachest the word of God in truth; Is it lawful to give tribute to 'Cæsar, or not? Shall we give, or shall we not give? But he, 'knowing their hypocrisy, said unto them, Why tempt ye me? 'Bring me a penny, that I may see it; and they brought it. 'And 'he saith unto them, Whose is this image and superscription? 'and they said unto him, Cæsar's. And Jesus answering, said 'unto them, Render to Cæsar the things that are Cæsar's, and to 'God the things that are God's; and they marvelled at him.'

"In the 17th chapter of Matthew, and 24th and following verses, we find the proof of our Lord's practice.

"'And when they were come to Capernaum, they that received 'tribute money came to Peter, and said, Doth not your master pay 'tribute? He saith, Yes; and when he was come into the house, 'JESUS PREVENTED HIM, saying, What thinkest thou, Simon? 'Of whom do the kings of the earth take custom or tribute? Of 'their own children or of strangers? Peter saith unto him, of 'strangers. Jesus saith unto him, nevertheless, lest we offend 'them, go thou to the sea, and cast an hook, and take up the fish 'that first cometh; and when thou hast opened his mouth, thou 'shalt find a piece of money: that take, and give unto them, for 'me and for thee.'

"As Michaelis has shown to all who will take the trouble of inquiring—and men, who set their consciences above the law, are at least bound to enquire whether their consciences do not mislead them—this tribute, thus obtained by miracle, and thus cheerfully paid, was a gift to the Roman government—a gift sure to be expended in tyrannical aggression, in sensual luxury, and sacrifices to Jupiter, and all the other "obscene driads" of pagan polytheism: not as a church-rate is, on what Dissenters believe to be essentially the true, though in details perhaps erroneous, worship of him whom Churchmen and Dissenters acknowledge, alike, as the true God."

This is what the writer calls satisfactorily disposing of the question of cheerful obedience. Indeed! Obedience to what? To the

payment of church rates to support and repair the buildings of the established sect? To pay for the wine and the singing men (choristers they call them) of their worship? Oh, no. It establishes that a conquered people must submit to pay tribute to their conquerors, "lest they offend them;" but the answer, "RENDER UNTO CÆSAR THE THINGS THAT ARE CÆSAR'S, AND UNTO GOD THE THINGS THAT ARE GOD'S," reserved the whole question; for our Lord knew that the then established sect had sent those men to ensnare him.

This quotation is a most unfortunate one for those who seize and sell other men's goods to sustain their own worship; for it is building on an answer obtained by spies, hypocrites, and tyrants, who sought to destroy their Saviour.

When the evangelist himself tells us, in so many words, it was a question of the payment of tribute unto Cæsar, we needed not the authority of Michaelis to enable us to understand it; but this reference to Michaelis serves to mystify rather than to illustrate the subject. It was not "a gift to the Roman government," but a rendering of a tribute, exacted by conquerors from their captives.

The circumstances under which the observation occurred are interesting.

The parables of the marriage supper and of the vineyard, had incensed the Pharisees to such a degree, that they combined with the Herodians or Sadducees to put him to death, and they "took counsel how they might entangle him in his talk." And they sent out unto him certain of the Pharisees with the Herodians, "to catch him in his words." It seems their hatred of Jesus was more violent than the bitter enmity that had been long rooted in the breasts of the two sects against each other. Having, therefore, resolved to send certain of their disciples to catch him in his words, they directed them to feign themselves just men; men, who had a great veneration for the divine law, and dread of doing any thing inconsistent therewith; and, under that mask, to beg him, for the ease of their consciences, to give his opinion whether they might pay taxes to the Romans consistently with their zeal for religion. It seems this question was much debated in our Lord's time; one Judas of Galilee having taught the unlawfulness of paying the taxes, and gathered a numerous faction, especially among the common people. The priests, therefore, imagined that it was not in his power to decide the point, without making himself obnoxious to some of the parties, who had divided upon it. If he should say it was lawful to pay the taxes, they believed the people, in whose hearing the question was proposed, (see Luke v. 26.), would be incensed against him, not only as a base pretender, who, on being attacked, publicly renounced the character of Messiah,* which he had assumed among his friends, but as a flatterer of princes also, and a betrayer of the

* The notion which the generality of the nation formed of Messiah was, that he would deliver them from foreign servitude. If, therefore, he who called himself Messiah, recommended the paying of taxes to the Romans, this they thought was inconsistent with his pretensions, nay, it was a renouncing of them altogether.

liberties of his country, one that taught doctrines inconsistent with the known privileges of the people of God. But if he should affirm that it was unlawful to pay, they resolved to inform the governor of it, who, they hoped, would punish him as a fomenter of sedition. Luke xx. 20. "And they watched him, and sent forth spies which "would feign themselves just men, that they might take hold of "his words, so that they might deliver him unto the power and "authority of the governor." Highly elated, therefore, with their project, they came and proposed the question, after having first passed an enconium on the truth of his mission, and upon his courage, integrity, and impartiality, with a design, no doubt, to make him believe that they were his friends, and that he ought boldly to declare what the will of God was in the matter. Mark xii. 14. "And when they were come, they say unto him, Master, we know "that thou art true (Luke, that thou sayest and teachest rightly) "and carest for no man; for thou regardest (Luke, acceptest) not "the person of men, but teachest the way of God in truth. Matt. "xxii. 17. Tell us, therefore, what thinkest thou? Is it lawful to "give tribute unto Cæsar or not? (Mark, shall we give, or shall we "not give?) But Jesus perceived their wickedness, and said, Why "tempt ye me, ye hypocrites? Show me the tribute-money. "And they brought unto him a penny. And he saith unto them, "Whose is this image and superscription? They say unto him, Cæ-"sar's." It seems the Romans chose to receive this tribute in their own coin. "Then saith he unto them, render *therefore* unto Cæsar "the things that are Cæsar's." The Jews were so tenacious of the customs of their country, and had so high an opinion of their own holiness, that they would not make use of heathen money, as appears from the business of the money changers mentioned in the gospels. Probably it was for this reason that the Romans insisted on having the taxes paid in their own coin, because, by making it current, they taught the Jews that they were their masters. Hence the force of our Lord's argument appears. Since this money bears Cæsar's image, it is his; and by making use of it, ye acknowledge his authority. If so, I leave it to yourselves to judge, whether tribute ought to be paid toward the support of that government which ye have acknowledged, which ye cannot shake off, and by which your tranquillity is preserved: that this was our Lord's meaning, appears from the illative particle, *therefore*, by which his answer is connected with the pharisees question; "They say unto him, Cæsar's; Then saith he unto them, Render therefore unto Cæsar." Having thus declared the lawfulness of paying taxes to the civil powers, he ordered them, at the same time, to be careful to pay to God what was his due, as their maker and preserver; "Render therefore unto Cæsar the things that are Cæsar's; and unto God the things that are God's." In discharging your duty to the civil magistrate, you should never depart from the duty you owe to God. The pharisees, and their adherents, under pretence of religion, often justified sedition; but the Herodians, in order to ingratiate themselves with the reigning powers, made them a compliment of their consciences, complying with whatever they

enjoined, although directly contrary to the divine law. Our Lord therefore, when he returned his answer, had both in his view, exhorting them in their regards to God and the magistrate, to give each his due; because there is no inconsistency between their rights, WHEN NOTHING BUT THEIR RIGHTS ARE INSISTED ON.

Thus the crafty counsel, formed by the opposite factions for discrediting Jesus with the people, was of none effect. "And they could not take hold of his words before the people."*

THE BOOK OF MOLOCH.

CHAPTER III.

The Choosing Ministers.

1. WHEN ye go out to choose holy ones to be of your brethren, and to minister at the altar, choose ye from among the youth; even those whose judgments are not yet ripe, and whose hearts know not yet whether they incline to God or Mammon.

2. But ye are wise, and ye shall know the inclining of their future spirits, and ye make them incline to the good things which the church hath in store for them that are called; even those that be called of you.

3. Then shall ye have them taught exceeding many things; they shall not be as "ignorant fishermen," or husbandmen, or men speaking one tongue, and serving God only by the knowledge of his law.

4. Nay, ye shall make them wise in the things of your wisdom; yea, exceedingly cunning in many mysteries, even the mysteries which you teach.

5. Then shall they be fitted for the "layings on of hands," and when the bishop hath done his office then shall they be reverend divines.

6. But if any man believe that he is called of God to speak to his brethren "without money and without price;" though his soul be bowed to the will of the father, and though he work all righteousness, and "speak as with the tongue of an angel," if he be not made divine by your rules and by the hands of a bishop, then he is not a divine, nor shall he preach.

7. He that is chosen of you shall give you honour, and shall be honoured of men, and honoured of women; and verily expects his reward.

CHAPTER III.

The Performance of Preaching.

1. When ye go to the church to preach, go not by the retired way where go those that would shun the crowd, but go into the

* See Macknight on the gospels.

highway where go the multitude; and see that ye have on the robes of black, and take heed that your pace be measured well, and that your march be stately.

2. Then shall your "hearts be lifted up," even as the hearts of mighty men shall they be lifted up. And ye shall be gazed upon by the multitude, and they shall honour you; and the men shall praise you, and the women shall glorify you; even by the women shall ye be glorified.

3. And when you go in, go not as go the unordained, prepared only with a soul to God, and with a heart to men, and a spirit filled with the Holy Ghost; but go ye with your pockets full of paper, and full of divine words; even in your pockets shall divinity be.

4. And let your sermons be full of the "enticings of man's wisdom," and let it be beautified with just divisions, with tropes, and with metaphors, and with hyperbole and apostrophe, and with interrogation, and with exclamation, and syllogisms, and with sophisms, and throughout let declamation be.

5. And take good heed to your attitudes and your gestures; knowing when to bend, and when to be erect, when to lift your right hand, and when your left, and let all your motions be graceful; even in your attitudes and gestures let your grace be. Thus shall ye be pleasing in the eye of the people, and graceful in their sight.

6. Let your voice at times be smooth as the stream of the valley, and soft as the breeze that waves not the bough on the bank; at times let it swell like the wave of the ocean, or like the whirlwind on the mountain top.

7. Then shall ye charm the ears of your hearers, and their hearts shall be softened, and their minds shall be astounded, and their souls shall incline unto you; and the men shall incline unto you, and likewise the women; yea, unto your sayings and your persons shall they be inclined.

8. And be ye mindful not to offend the people, rebuke ye not their sins; but when ye rebuke sin, rebuke it at a distance; and let no man apply your saying to his own case; so shall he not be offended.

9. If a brother shall raise up the banner of war against brother, and Christians against Christians, rebuke them not, but be some of you on the one side, and some on the other; and tell the one host, that God is on their side, and the other host, that he is on their side; so make them bold to kill. And even among swords and lances let your black robes be seen.

10. Preach ye not "peace on earth, and good will to men," but preach ye, glory to the victor, and victory to the brave.*

---

* The Reverend J. Haine writes thus:—"I was preaching one day, when the duke, (Marlborough Commander,) unknown to me, came to hear me. I that day desired the soldiers never to come there, or *to any place of public worship*, so as to neglect their duty. I exhorted them to be ready at all calls, and to obey *those who had rule over them*; and if called out to battle, to stand fast, yea, if needful, fight up to the knees in blood. And this is no ways contrary to the tenderest conscience, as many of you found at Fontenoy, when both you and I did our duty,

11. If any man go into a foreign land, and seize upon his fellow man, and put irons upon his feet, and irons on his hands, and bring him across the great deep into bondage; nay, if he tear asunder the dearest ties of nature, the tenderest leagues of the human heart; if he tear the wife from the husband, and force the struggling infant from its mothers bleeding breast, rebuke him not!

12. And though he sell them into foreign slavery, to toil beneath the lash all their days, tell him not that his doings are of Antichrist: for lo, he is rich and giveth unto the church, and is esteemed pious, so shall ye not offend him, lest, peradventure, he withdraw himself from your flock.

13. Still preach ye salvation unto men,—that is, salvation unto them that read the law and believe; but unto the nations that do not believe the law, not having seen it, preach ye damnation.

14. Yet show these things to the people at a distance, lest by bringing them too near, ye raise alarm; however, still show them that they believe, although their understandings comprehend them not.

15. Teach them to believe that you have the care of their souls, and that the saving mysteries are for our explaining; encompass them round about with words, as with a bright veil, so bright, that through it no man can see.

16. And lo, ye shall bind the judgments of men, (and more especially of women) as with a band of iron: and ye shall make them blind in the midst of light; even as the owl is blind in the noonday sun. And, behold, ye shall lead them captive to your reverend wills.

The Human Body. Essay XIII.—*The Liver. Sedentary Men. Effects of Anxiety. Eating Bacon.*

(Continued from the preceding Number.)

When the bile is needed, or when the stomach is irritated by food, emetics, or purgatives, the bile then flows from the gall bladder, and also from the liver, by means of the duct, (formed as it were by the hepatic duct and of the duct from the gall bladder, the *cystic* duct.) called the *common bile duct*, already referred to, as entering the duodenum.

---

and yet were all the time filled with love, and peace, and joy in the Holy Ghost."

The practice alluded to in the text, is a thing of such horrid notoriety, as to need no comment. It is enough to remark, that those who are deep in this sin, come unreproved to the communion table of the Christian church.

It is the well known doctrine of Christians, engaged in Indian missionary schemes, that the souls unredeemed by an inward knowledge of the Bible are lost! See their writings.

"*Mystery.*—Something above human intelligence; something artfully obscure; an enigma; anything artfully made difficult; a trade, a calling.

"*Mystagogue.*—One who interprets divine mysteries: also, one who keeps church relics, and shows them to strangers."—*Walker's Dictionary.*

The blood, after being deprived of its bile, is received by certain veins, called the *hepatic* veins, which carry it into the *large vein*, called the *vena cava*, which carries the blood from all parts of the body to the heart.

One matter of peculiar interest is connected with the liver; which is, that, while the secretions of almost all the other organs of the body take place from the *red* blood, carried by *arteries*, hence called arterial blood, this secretion is secreted from the dark blood, carried by veins, called *venous* blood.

Why this deviation from the usual rule in these cases? The following statement will explain.

The vena portæ is supplied by the veins which arise from the small venous extremities existing upon all parts of the intestinal canal, and consequently it may be inferred, that this blood must be loaded with many impurities: which impurities, if taken into the general circulation, would be injurious to the individual. The Creator, therefore, has in his wisdom, (at least so it appears,) appointed that this impure blood shall pass through the liver; and, that, therein its impurities shall be separated. But mark the wisdom. Not only are the impurities separated, but these very impurities are manufactured by the liver into a liquid, called *bile*, which is of the highest importance in digestion, as has been already shown in preceding Essays.

Some Practical Remarks, connected with this description of the liver, may now be detailed.

1. That every unusual stimulus, which the stomach receives, seems, at the same time, to stimulate the liver, and calls it into a degree of action, which frequently repeated, must induce disease. Hence it is that those individuals, who take spirits constantly, and thereby to excess, induce a diseased state of the liver, and thus prematurely bring life to a termination, inducing dropsy and other distressing consequences. These consequences being, in their production, attended with irritability of temper, and other inconveniences to the individual himself and to others.

2. *Practical Remark.*—From the facts already stated, it is easy to understand why individuals suffer so much from head-ache, and other unpleasant affections, when the liver does not secrete the *necessary quantity of bile*. The blood, in such cases, is not deprived of those impurities, which, by the action of the liver in a healthy state, are separated from it and converted into bile. Not separated they must circulate with the blood; the blood traversing organs in this impure state must necessarily induce disease, or at least, irregular actions in the organs through which it passes. How often has a great oppression upon the spirits, a great heaviness of the general feelings, been relieved by a copious discharge of bile.

3. *Practical Remark.*—From the preceding statements, the cause of the injurious effect of a super-abundance of bile, will be rendered apparent. The bile, in a certain quantity and proportion, is a proper stimulus to the intestines. If in too large a proportion, it becomes too stimulating, and occasions considerable irritation

throughout the whole lining of the bowels: and cholera supervenes as one of the consequences.

4. *Practical Remark.*—In some cases it seems to be advantageous to induce an increased secretion of bile. Then *bacon* is good: and hence the high opinion which many entertain of bacon as a remedy in bilious affections.

5. *Practical Remark.*—Sedentary occupations seem to be injurious to the action of the liver. Literary men suffer much from affections of the liver. There is no reason to believe that they would suffer much if they attended to their diet. Very generally they take food irregularly: they eat to excess: and drink stimulating liquors, under the influence of social companionship. They seem to like a sort of excitation in all that they do: the consequence is, that the stomach and the liver are unable to perform their various duties. They are not aided by regular exercise in the open air: and the consequence is, that a sallowness of complexion, and other indications of unsound health, mark out the man, who sits to raise a world.

6. *Practical Remark.*—Anxiety seems to have a great effect upon the liver. It is astonishing the constancy of the coincidence between long continued anxiety and pain in the region of the liver.

The liver, therefore, it is quite apparent, requires a considerable amount of care. This given, it will reward, by a healthy performance of its functions, the individual who acts thus wisely.

SENATORIAL PROPHECIES.

Sir William Thompson, — "Mr. Speaker, London is circumscribed, I mean the City of London; there are walls, gates, and boundaries, the which no man can increase or extend; those limits were set by the wisdom of our ancestors, and God forbid they should be altered. But, Sir, though these landmarks can never be removed—I say *never*, for I have no hesitation in stating, that *when the walls of London shall no longer be visible, and Ludgate is demolished, England itself will be as nothing* — though, Sir, these landmarks are immovable, indelible, and indestructible, except with the constitution of the country, yet it is in the power of speculative theorists to delude the minds of the people with visionary projects of increasing the skirts of the city, so that it may *even join Westminster.*"

Mr. Boscawen said,—" If there were any advantage derivable from a *bridge at Putney*, perhaps some gentlemen would find out that a *bridge at Westminster* would be a convenience. Then other honourable gentlemen might dream that a bridge from the end of *Fleet Market into the fields*, on the opposite side of the water, would be a fine speculation; or, who knows, but at last it might be proposed to arch over the river altogether, and build a *couple more bridges, one from the Palace at Somerset House into the Surrey*

marshes, and another from the front of Guildhall into Southwark? (great laughter.) Perhaps some honourable gentlemen, who were interested in such matters, would get up in their places, and propose that one or two of these bridges should be built of iron! (shouts of laughter.) For my part, if this bill passes, I will move for leave to bring in half-a-dozen more bills, for building bridges at Chelsea, and Hammersmith, and at Marble Hall Stairs, and at Brentford, and at fifty other places besides." (continued laughter.)

Sir Henry Herbert, just before the House divided, said,—"I honestly confess myself an enemy to monopolies. I am equally opposed to mad, visionary projects; and I may be permitted to say, that in the late king's reign, several of these thoughtless inventions were thrust upon the House, but most properly rejected. If a man, Sir, were to come to the bar of the House, and tell us that he proposed to convey us regularly to Edinburgh, in coaches, *in seven days*, and bring us back *in seven days more*, should we not vote him to Bedlam? Surely we should, if we did him justice: or, if another told us he would sail to the Indies in *six months*, should we not punish him for practising upon our credulity? Assuredly, if we served him rightly."

THE WIG RIOT.

In the year 1764, owing to changes in the fashion, people gave over the use of that very artificial appendage, the wig, and wore their own hair, when they had any. In consequence of this, the wig-makers, who had become very numerous in London, were suddenly thrown out of work, and reduced to great distress. For some time both town and country rang with their calamities and their complaints, that men should wear their own hair instead of perruques; and at last it struck them that some legislative enactment ought to be procured, in order to oblige gentlefolks to wear wigs, for the benefit of the suffering wig trade. Accordingly they drew up a petition for relief, which on the 11th of February, 1765, they carried to St. James's, to present to his Majesty George the Third. As they went processionally through the town, it was observed that most of these wig-makers, who wanted to force other people to wear them, wore no wigs themselves; and this striking the London mob as something monstrously unfair and inconsistent, they seized the petitioners, and cut off all their hair *per force*. Horace Walpole, who alludes to this ludicrous petition, says, "should one wonder if carpenters were to remonstrate, that since the peace their trade decays, and that there is no demand for wooden legs?"—*Book of Table Talk.*

THE NEXT STEP.

In one of the late numbers of the Anthropological Magazine, the House of Peers, as it now is, was proved to be injurious to the well-being of the country; and its reform, or abolition to be expedient. The last, I fear, cannot be effected without bloodshed, and bloodshed men are learning to abhor: but by the union of the two Houses of Parliament in one,—the liberals still retaining their majority, which must increase as knowledge is further diffused,—the power of the lords as a body, will be virtually destroyed, and the bar they now offer to the progression of the political world, removed. This, should all other efforts fail, might, at last, be accomplished by the elevation of a sufficient number of liberal men, pledged to support the measure, to the peerage. I could proffer many arguments in support of it: but, as they will naturally occur to all, who contemplate the matter, I shall say no more. The creation of peers for any inferior purpose is impolitic: some of the greatest foes to the true advance of their country are found in those latest made, and who are most indebted to her bounty.

S. N.

ENQUIRY AS TO THE CAUSE OF THE DIFFERENCE IN THE SIZE OF THE TWO SIDES OF THE HEAD.

Sir,—Some time since, I addressed a query to you connected with Phrenology, hoping that (from your extensive knowledge of the subject,) you would have obligingly solved it; or, at any rate, offered some opinion respecting it. You wish me to give some proofs of the existence of a larger portion of ideality, on the one side or other, according to whether the subject of it composes in blank verse or in rhyme. At present this is not in my power; I have taken considerable pains to endeavour to meet your views on this point, but hitherto have not been able to gain the necessary knowledge; for you must be well aware, that it is not easy to obtain an inspection of many busts, and, even of those that I may have seen, there might not be many, if any, that would enable me to solve the difficulty. As you possess the means so much more readily than I do, I hope you will take the trouble of pursuing the enquiry, and then favour me and your readers with the result, which I shall feel much interest in knowing.

I am, Sir, your's respectfully,

AN ENQUIRER.

Sept. 19, 1836.

[Note.—This letter of our friend, "An Enquirer," is published in the hope that it may lead some phrenologist to investigate the causes which produce the frequently occurring difference in size of the two sides of the head.—Editor.]

SURPLUS REVENUE IN THE UNITED STATES, AND A PLAN TO RENDER IT USEFUL TO BRITAIN.

In this over-taxed country of ours, where every article we touch must pass through the crucible of the taxing machine, we can scarcely form an idea of the government of a country almost without taxation, having a large surplus of revenue. This is so much at variance with all our experience, that the very statement of such a thing appears to us to have much of the character of a fairy tale. True it is, however, that the United States of America have realized, from the *sale of lands alone*, during last year, more than all the expences of the government, and that they have a surplus revenue of about nine millions sterling; and it appears from the statement of the President to Congress, that the government are likely to have as much difficulty in disposing of this surplus revenue, as the governments of other countries have in obtaining what they consider absolutely necessary for their support.

Strange as it may appear to us, this is a state of things exciting considerable alarm in the United States, both on account of its present effects, and a fear of the consequences to which it may lead. From the close connection subsisting between this country and America, no circumstance that is of deep importance to the latter ought to pass unheeded by the former, and it is on this account that we wish to direct the attention of our readers, and it may be of the government of Great Britain, to the surplus revenue of the United States.

The history of all past ages shows us, that nothing can be so destructive to liberty as super-abundant wealth, and the luxury that necessarily follows, or rather accompanies it. The best hopes of the human race are bound up with the continued integrity and continued prosperity of America. The disruption of the union of these happy states, would be the signal for once more erecting the standard of despotism throughout the old world, and it is not easy to calculate how far our own country might be involved in the struggle. The instability of republican institutions would become the constant theme of tory declamation, and many of those, who appear now to be enlisted in the ranks of the liberals, would make common cause with their quondam friends. The Peels and the Wellingtons might thus be exalted again to power, and might wield the resources of this great country in opposition to the liberties of mankind; might crush the rising hopes of England, and retard the march of freedom for another half century.

But this is not all. The United States of America are the possessors of a territory almost boundless. There is abundance of room for the human race to increase and multiply. Almost every variety of climate is to be found within the bounds of their dominions. The productions of the soil are more than abundant. The soil itself is rich, and capable of being cultivated, with comparatively little labour, to the sustentation of hundreds of millions of

human beings. North America is a country already populous; in the States alone are upwards of twelve millions; and so great is their prosperity, that they are going on doubling their population in twenty-five years. In all these respects, America is the very reverse of England. Our territory is limited,—the population constantly tending to outstep the means of subsistence; and, but for the produce of our mines and manufactures, the whole country must, long ere now, have been reduced to the same state of misery that at present reigns in Ireland.

With these views before us, can we be otherwise than anxious that some effort should be made to deliver the United States of America from the dangers that, at the same time, threaten them from a super-abundance of national revenue; and, also, so deeply interest ourselves. We say it in all seriousness; for we fear that with the thoughtless, the idea of being too rich may appear better calculated to excite a laugh than to produce sober reflection. We repeat, therefore, that the surplus revenue of the United States is fraught with danger, not only to themselves, but also to England. For the proof of the former of these propositions we need only to refer to the speech of President Jackson, and in proof of the latter, it is only necessary to state, that nearly a fourth part of all the exports of this country are to the United States. To this extent, then, we are dependant on America; and it is to be remembered, that the *heavy expences of our government* can *only* be paid *out of the profits of our foreign trade*. It is not necessary at present to go into minute details respecting our trade with America, and the more so as these have lately been fully given to the country in a cheap form, by "A Manchester Manufacturer."

But it may be asked, what can the people or the government of this country do to relieve the people and the government of the United States, in their present distress? In reply to this question it may be stated, that there are two things which the government of this country can do, which would operate as a powerful relief to them, and greatly benefit us. First, our government can, and it ought immediately to endeavour to, negotiate a commercial treaty with America, on the principle of admitting *every article* of American produce duty free, not excepting wheat or flour. By this plan, the duties imposed by the American tariff on British manufactures imported into that country would be taken off, thereby reducing the amount of American taxation, and increasing the amount of the export of British manufactures. This, we think, must be evident at first sight, as it would have the effect of directing the attention of the people of America rather to the cultivation of the soil, than to the production of manufactured articles; hence they would have more to export from America of the articles most necessary for us, which would be all paid for by the produce of our mines, manufactories, and workshops.

Secondly. Our government can institute a negotiation for the sale of Canada, carefully guarding all private rights, which indeed the government of America would be disposed, as it would be its interest, to respect. This remark is suggested by the fact, that

great discontent, the forerunner of revolts, has, for some time past, manifested itself in Canada; and, in the course of things, they *must* become independent, and cease to form part of the possessions of Great Britain. The cession to the United States of the Canadas, would gratify all the Canadians that are not the stipendiaries of the British government; because, the two countries, Upper and Lower Canada, which are now at variance, would be formed into separate states, each having a legislature, and an executive government of its own; and there can be no doubt that it would be gratifying to the United States, from the anxiety which they have manifested to have the free navigation of the St. Lawrence, which this would give them. It is well known, that a negotiation has been going on for twenty years for the purpose of settling the boundaries of the United States, on the banks of the St. Lawrence, which is at present as far from being concluded as it was at the commencement. Indeed, so anxious are the Americans to get rid of all foreign interference, that there can scarcely be a doubt that they would willingly give a hundred millions sterling for the Canadas. This would relieve them of their surplus revenue for ten years to come; and would, besides, be of immense advantage to us. It would form a real sinking fund for the reduction of our immense debt; and with the increase that would be made in our trade, and the appropriation of other property which could be turned into the same channel at home, a reduction of ten millions annually, might almost immediately be made in our taxation,—setting free the springs of industry, and raising the condition of the working population of this country. These are results devoutly to be wished for, and every lover of his race would rejoice in their accomplishment.

We would impress it seriously and strongly on the attention of our countrymen, that our intercourse with America is by far the most important we have,—we mean *commercially*. Only reflect for a moment on the subject. Here are twelve and a half millions of mankind who are consumers of upwards of ten millions sterling worth of our manufactured articles. In the course of twenty or twenty-five years, we may expect that they will take double that quantity, because the population will be doubled, and in twenty-five years more, fifty millions. This is no hypothetical statement; for if our affairs are managed wisely, the amount may even be increased beyond this, and in the language of the late President Jefferson, "*The inhabitants of the old world may be maintained out of the produce of the fertile plains of the Mississippi.*"

REPORT OF THE SHIPWRECK COMMITTEE.

To the Editor of the Anthropological Magazine.

Sir,—I observe by several notices in the newspapers, that two of the most important clauses which were in the original draft of the Report of the Committee on Shipwrecks,—the one exposing the effect of the present vicious system of our insurance, and the other recommending the remedy to be adopted,—were struck out

of the published report. This appears to have been done against the decided opinion of the chairman, and several members of the committee, who considered these particular clauses not only most essential to be laid before the House of Commons, but to be communicated to the public. Other parts of the report, of the greatest importance, as they related to a safer and better method of ship-building than what is now in practice, as proposed by Mr. Oliver Lang, of the Royal Dock-yard, Woolwich; Captain Couch, of the Royal Navy, and myself, were also struck out. One of the main objects in the appointment of the committee, being to enquire whether improvements could be effected in the construction of ships, in order to diminish shipwrecks, it is natural to ask, why such vital and important clauses were struck out? Were they withheld from parliament and the public, because such improvements in ship-building, by diminishing shipwrecks, might operate against the interests of certain members of the committee? If separate interests were to be consulted, why appoint a committee at all? And, if meant for the benefit of the community, why appoint interested individuals members of it? In civil cases tried by jury, persons are not allowed to sit as jurymen where their own property is in dispute. Is this most just and wholesome rule, then, departed from in parliamentary committees; and are parties, there, made judges in their own cause, to serve private ends to the direct prejudice of the public, and where the safety of thousands and tens of thousands of human lives are at stake? The injustice, done to Mr. Lang, Captain Couch, and myself, is the greater, because, whilst our names have been struck out of the report, other names have been retained in it. I beg to be distinctly understood on this point, I think it extremely proper that the apparatus of Captain Manby, and the apparatus of Mr. Trewgrouse, should be recommended for national encouragement, as tending to the preservation of human life. But, whilst I cheerfully concur in this, I cannot help feeling the individual preference thus given, to the prejudice of others and myself, whose inventions and recommendations, if adopted, might have equally tended to that end, and, it is possible, might even have conduced in a greater degree to the preservation of human life. And, our names appear to have been struck out, for no other reason than because our recommendations, if put in practice, would be against the interest of certain members of that committee, who are opposed to strength and safety being adopted in the construction of merchant shipping.

I trust, Mr. Editor, that some independent member of parliament will investigate into the cause of this suppression, or that some of your numerous readers will put me in the way to bring the original report fairly before parliament, and the public. The subject is of too much importance to be smothered, or for any private interests to be allowed to prevail against providing for the safety of human life, and national property.

I am, Mr. Editor, your most obedient servant,

JAMES BALLINGALL,
Surveyor of Shipping.

Kirkaldy, Dec. 22nd, 1836.

REMARKS ON HOMÆOPATHY.

To the Editor of the Anthropological Magazine.

Sir,—As your periodical has taken such a high, philosophic, and eminently practical tone, I am sure you will not refuse admission to discussions on any topics connected with the happiness or improvement of the human race, however they may be assailed with ridicule, or however contrary they may be considered to the interests of any existing class of men. The greatest happiness of the greatest number is the truly philanthropic maxim of Bentham, and by it I am impelled to direct the attention of your readers to the system of Homæopathy, a discovery which, if true, will only be second in importance to that of Phrenology, and will place Hahnemann beside the immortal Gall. My present intention, however, is not so much to make speculations of my own on the subject, as simply to give some notion of its utility and practical advantages over the mode at present prevailing in this island. This I shall do by laying before the reader the following conclusions to which Dr. Rau has arrived, after a thirty-three years practice of the old, and a thirteen years practice of the new method. That gentleman, who is a district physician at Giessen, and has for years been in the possession of a most extensive practice, has stated them as follows.

1. The homæopathic principle, *similia similibus curantur*, notwithstanding the theoretical subtleties with which it has been attacked, is more and more confirmed by daily experience, and may now be considered as altogether incontrovertible.

2. The treatment of disease has acquired, by the application of this principle, a much greater degree of certainty; and hence a greater uniformity in the ordinations of different physicians is no where to be found than amongst homæopathic practitioners.

3. That no method ought to be judged of by the practice of a few of the *servile pecus*. Physicians of scientific acquirements consider the symptoms as the mere signs of an internal pathological process, and hence only as a guide to direct them in the support of the *vis medicatrix*.

4. The homæopathic method, far from having arrived at perfection, must look for improvement to the further cultivation of science. Being, however, founded upon indisputable facts, it cannot be suppressed by systems erected upon a purely speculative basis. It will, then, only be consigned to oblivion, when it shall be possible to discover a still surer principle for the treatment of disease, equally founded on facts.

5. It is highly to be censured that partially educated homæopathic practitioners should presume to reject every thing as useless lumber which the last two thousand years have taught us. The proper application of past discoveries has been of infinite service to the new doctrine, and the most skilful practitioners are, probably, those who are best versed in the various methods of treating disease. A general anathema against the allopathic and antipathic methods must, therefore, be so much the more unjust, as, in the

present state of the homæopathic system, we cannot altogether spare them.

6. Lastly, as compared with the usual method of treating disease, the homæopathic possesses the following recommendations:—

(1.) That the treatment of disease is conducted with much less expence, as fewer professional visits are requisite, and the medicines, being of little intrinsic value, are always distributed gratis; hence its introduction is a great blessing for the poorer classes.

(2.) That the medicines, on account of their tastelessness, excite no nausea, and may be administered to patients without their knowledge; an advantage of immense importance in the diseases of children especially.

(3.) That it is a particularly brilliant side of this method, that it is much more frequently possible, by its means, to suppress severe diseases at the very outset, and thus save the constitution many a painful struggle.

(4.) That the convalescence is much easier and quicker, since it is not disturbed by the collateral or subsequent effects of large doses and complicated remedies, nor has it to struggle with the debility induced by the profuse evacuations which are the general accompaniments of the usual methods of treatment.

(5.) That should an improper medicine be given, from the smallness of the dose no positive evil will follow, as the only injury sustained will be from the loss of time. On the contrary, should an allopathic practitioner commit an error, it is often altogether impossible to correct it; and what is usually termed active practice, by the old school, is infinitely more frequently mischievous than the loss of time occasioned by the choice of an inefficient homæopathic remedy.

Finally, in answer to a report which has been industriously circulated by the opponents of Homæopathy, that the practitioners of the new method use medicine in a highly concentrated and poisonous form, it may be met with a direct contradiction, being absolutely false, as every novice in the homæopathic method must well know; for, so far from such being the case, the prevailing principles of homæopathic pharmacy are, every where, dilution and sub-division; and in no work on the materia medica, as yet, has a single vegetable alkali been introduced, not even quinine. Let practitioners of the old school, therefore, instead of endeavouring to account for effects, which they cannot deny, by false assertions, study the subject fairly, and they will then assuredly find that the susceptibility of the animal frame for its specific irritant, is a fact perfectly analogous with that of a chemical solution for its specific re-agent, and equally rational, but *surdis narratur fabula.*

Such are the conclusions arrived at by one who is worthy of confidence on medical matters, and if the reader will turn to Dr. Simpson's *Practical View of Homœopathy*, he will assuredly find much to awaken him to the importance of the subject. There are many errors prevalent regarding Homæopathy, which it may be as well to dissipate by an appeal to facts. Dr. Simpson thus speaks of a very common and very erroneous view of the subject:—"The

opponents of Homæopathy have endeavoured to prove the inactivity of the the homæopathic attenuations, by the argument that a healthy individual might swallow at once the whole contents of a homæopathic medicine chest, without experiencing any injurious effects ; apparently forgetting altogether that the peculiarity of these remedies, as such, consists not in acting upon healthy individuals, but only upon those whose susceptibility has been so preternaturally augmented by disease as to have acquired for them, as it were, a temporary idiosyncracy for a specific irritant; in the same way as a certain tone, vibrating in the air, will only be resounded by that chord of a musical instrument lying near that is tuned to the same pitch, or that a wine glass may be thrown into such violent vibrations as to break, by a powerful voice singing the note which it was fitted to yield, whilst a hundred surrounding glasses will remain unaffected." p. 155.

Another error is exposed as follows: Dr. Simpson is speaking of a German work, published in 1832:—" This work created a great sensation in Germany, from the reputation of the author as an intelligent practitioner of the old school. The first volume contains the result of many years practice of the old method, for which he was much lauded; the second, (published two years after,) proclaims the importance of Hahnemann's discoveries, and was violently assailed by the self-same critics. The author seems to have imbibed the strange notion, that Homæopathy and decillionth-doses are one and the same thing,—a monstrous error." p. 339.

Dr. Simpson gives a catalogue of 120 works on Homæopathy, and some of them against it, to the titles of each of which he has appended some very judicious remarks, a few of which I shall cite as tending to clear away misconception :

(Work 44.) This contains the result of experiments with medicines on healthy individuals, by Professor Jorg, of Leipzic, with the view of establishing the correctness of the principle *contraria contrariis curantur;* they prove, however, just the reverse, or that *similia similibus curantur.*

(45.) Contains the usual ingredients of an attack upon Homæopathy.

(55.) Rummel was two years previously an allopathic practitioner, and in this work first announced the result of his experiments with the new method: he has since become one of the warmest defenders of Homæopathy, as he is also one of its rational advocates.

(58.) In an historical point of view an interesting work, though the attempt to depreciate Hahnemann's merit by such means is pitiful in the extreme.

(62.) Alarmed at the favourable reception of Homæopathy by the public, the author makes a fruitless attempt to stem the torrent.

(90.) An attempt to injure Homæopathy by the relation of a few cases miserably treated a Dr. Reisig of Berlin. As reasonable a process as it would be to adduce the blunders of some dozen allopathists, to prove that the old system was good for nothing.

(97.) A work composed of the usual allopathic ingredients

when discussing this subject, viz.: gross personalities, great misrepresentation, and the selection of all the blundering cures attempted by decillionth practitioners.

Besides the numerous works on Homœopathy, there are many periodicals devoted to that subject in Germany, Sweden, Denmark, and America, which demonstrate pretty clearly that the subject has taken some hold of the public mind; "and surely none but a fool or a madman," says Dr. Simpson, "would run the risk of poisoning his patients by large doses, when he knows that, by a minute dose of an appropriate medicine, he can do all that it is in the power of medicine to effect. I again, therefore, earnestly call upon the profession to look to experiment alone for the removal of their prejudices, for by it alone can the value of the homœopathic method be duly appreciated. He who honestly tries this method in practice will soon find that the confidence which it is daily acquiring, with the public, is by no means chimerical or likely to pass away; on the contrary, he will see that it is founded upon the greatest discovery that has ever adorned the annals of practical medicine, and which, in its ultimate influence on the well-being of mankind will entitle its discoverer to the eternal gratitude of posterity. Hitherto, it is but too true, he has had to endure every species of contumely, both from the learned and the unlearned of the profession. In this, however, he has only shared the lot of every other great benefactor of the medicinal art—Harvey, Jenner, Gall, and indeed of almost every great discoverer in science, whose destiny seems still to have consisted in never being duly appreciated by their contemporaries. But posterity will vindicate the title of Hahnemann, to be ranked among the great names of his age, for *magna est veritas, et prævalebit:* already, indeed, the dark clouds of prejudice are beginning to fly before the light of the great truths he has unfolded."

Many and powerful are the obstacles which yet stand in the way of the complete triumph of Homœopathy. There are, however, instances, not a few, in which practitioners of long standing and repute in the old school, have become converts to the new doctrine. Such men are an honour to their race, and will find abundant reward for the temporary obloquy heaped upon them, in the exquisite thought that they are accelerating human happiness by diminishing human misery. We should look for the organs of conscientiousness, benevolence, and causality, as predominant in the heads of those who can resolve to undergo pecuniary loss for the sake of ameliorating the sufferings of their fellow-creatures; and such is the development we should look for in the physician who says, with Hahnemann, that "the highest, nay, the sole vocation of the medical practitioner, is to make sick men sound; and the *beau ideal* of the healing process is an easy, quick, and lasting restoration of health, or a complete annihilation of disease in the shortest, surest, and safest method."

C. T. WOOD.

Campsall Hall, Doncaster,
Dec. 18, 1836.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse*.]

No. 7.] MARCH 1, 1837. [Vol. II.

PHRENOLOGY AND CRIMINAL LEGISLATION, AND CRIMINAL DISCIPLINE.

An Essay read before the Anthropological Society, by John Epps, M.D., *January* 26, 1837.

Continued from page 164.

We have now to attempt the establishment of a most important principle, namely, that SANGUINARY LAWS, OR THE LAWS BEGOTTEN BY THE ACTIVITY OF THE ANIMAL FEELINGS, are not effectual in preventing the violations of the order, in which the Creator has placed the faculties; in other words, that Criminal Legislation and Criminal Discipline, when founded upon the idea of punishment, do not either prevent the commission of crime, or reform the criminal.

It is a truth, established by observation, that the manifestation of self-esteem by one individual has a tendency to awaken the self-esteem in another. It is a fact Phrenology establishes, that the head with large self-esteem can hardly ever come into contact with another head with large self-esteem without a conflict. If a man throws back his head in the direction of the organ of self-esteem, (a position, the natural language of this organ,) the observer, if endowed with a large organ of self-esteem, feels an almost irresistible tendency to throw his head into the same position. If one individual manifests destructiveness to another, such manifestation immediately awakens such organ in the one to whom the manifestation is made. It is a common occurrence, that a fierce dog, going along a street, and beholding another dog, good natured, passes forward without taking any notice: but, if meeting a cross surly dog, like himself, a battle immediately ensues.

Apply this to the punishment of criminals. An individual has allowed his acquisitiveness to overpower his benevolence and conscientiousness. By so doing he wounds the acquisitiveness of the party injured. Acquisitiveness, thus injured, awakens destructiveness into activity, and *revenge*, not *reformation*, is sought. The manifestation of this awakens destructiveness in the injurer: for he feels that the punishment inflicted has no relation to the crime he has committed: and feeling this, concludes, that he is punished more than he deserves. He, therefore, makes it a virtue to resist any contrition, any reflection, upon the impropriety of his conduct, and determines to bear his lot with fortitude; and is led, thereby, to scorn the approaches of those, who might have benefitted him.

This feeling is more particularly strongly produced when the law violated is a law, which itself is a violation of the laws of nature. Hence it is that poachers and smugglers are looked upon, and look upon themselves, as men of superior standing; and feel that the severe punishments, inflicted upon them, are not at all in proportion to their crimes, if the killing a hare, which has lived upon the man's farm, is a crime. The severity of the punishments keeps these men in a state of mental resistance against the law, and they are led often to commit crimes of a deeper die, because they know that the punishment for them will not be more severe; and, as they say, as they will be punished they will be punished for *something*. Thus crime is made a virtue, and a sympathy is excited in favour of poachers and smugglers, because the former are really the advocates of *natural right*, and the latter the defenders of *free-trade*.

One of the best evidences afforded of the inefficacy of punishment, when appealing to the animal feelings, is that presented by the British army.

It is well-known that one punishment in the British army is *flogging*, which is an appeal, principally to one animal feeling, namely, *cautiousness*: it is also a violation of other animal feelings, namely *self-esteem* and *love of approbation*: and the discipline itself is the product of the activity of the animal feelings. What has been the consequence? Has it reformed the British army? The best answer is the statement of Mr. Ellice in the House of Commons, namely, that every tenth man (privates) in His Majesty's service had been through one or more of His Majesty's jails. Any person, who has any doubt of the injurious effect of flogging, and of its necessary tendency to induce the state of mind, favourable to the production of crime, has only to reflect upon the faculties to which flogging either appeals, or which it violates, and he will soon be convinced.

To aid in this conviction, a case may be stated. A soldier, under the influence of drunkenness, or some strong feeling, violates the discipline of the army. His offence is deemed worthy of punishment: and the punishment will be, it is evident from the views previously developed, in accordance with the organization of the legislators. The legislation of the army has been devised principally by military men: and they, from their organization, devise a lamentable testimony to the miserable character of that organization, whipping; or what may be more correctly called the *system of tearing backs*. What does this do? It appeals to cautiousness, an animal feeling. It wounds self-esteem, disgracing the man in his own estimation. It destroys the activity of love of approbation: for now he has lost his character: he has been whipped. He thus loses all motive for proper conduct: he feels himself degraded to the condition of a dog: he therefore can no longer retain the dignity of a soldier: he has lost character among his comrades, and his superiors, and therefore he has no inducement to obtain their favour: and, added to this, his self-esteem combines with his destructiveness and his firmness, and he determines to prove by

his reckless and disobedient conduct, that flogging shall not restrain him.

It is allowed by many that flogging is not serviceable to the individual flogged, but it is useful to others as an *example*. To be an example it must present *motives*. What motives can flogging awaken in the soldiers who are spectators? Seeing the lacerated back of their comrade may awaken cautiousness in them: and may make them fear to do anything that may cause such a punishment to be inflicted upon them. This will be a motive to those who have large cautiousness; but this is not a feature in a soldier's head. They have large combativeness: are a kind of dare-devil fellows. They have self-esteem large, and the punishment produces many a feeling of discontent, and many a feeling of indignation in the minds of the spectators: and, some day, we have no doubt that as education is spread through the army, the system of tearing backs will be put a stop to, by an educated drummer refusing to apply the cats to the back of a fellow-man. He will be tried, it is true, and they will order him to be flogged: some other drummer will be ordered to inflict the lashes, but he refuses too. And some martinet puppies, red-butterfly soft-fingered fools, whose principal businesses are female seduction and beholding themselves in the glass, and lounging about the mess-rooms, will hold a court-martial, and decide upon stopping the progress of disaffection by ordering the drummer to be shot. And then the people of England, the better organized, the more morally and intellectually developed people, will say with the voice of thunder, that it shall not be: and that the hand who dares to inflict the punishment shall be remembered. This will be the case, if the British Parliament do not abolish the practice of flogging.

It has been said that the men in the army are so bad, being the dregs of society: men, who are too lazy or too dissipated to get their living by honest labour: that, therefore, such punishment, this back-tearing, which would be unsuited to others, is suited to them.

This may be true: but such reasoning, as used by these individuals, is mere verbiage: for in an order from the Horse Guards, lately issued, which had reference to some violences which the privates, who wear bayonets when off duty, had committed, they were told that the profession of a soldier was "honourable," and that, therefore, they should conduct themselves as connected therewith: and yet these very authorities who issue such an order, maintain that the soldiers are so degraded, that they require to be kept in order in the same way as the huntsman rules his hounds.

An event took place lately in France, which, while it shows the character of Louis Philippe in a light, which has been now so often exhibited that no one can doubt his hypocrisy, at the same time demonstrates that unjust severity of punishment is not effectual in preventing crimes.

"John Louis Marin was condemned in 1833 to five years' imprisonment and hard labour for desertion; he was placed in the military prison of Bellecroix, at Rochelle.

"The labours of this prison are so odious to the convicts that they seek, under any circumstances, to be transferred to another place of confinement. They have been often known to commit some crime or misdemeanour, which, by increasing their punishment, causes likewise their removal.

"Marin shared with his comrades this dislike; and was determined at all hazards to quit Bellecroix—on one occasion he struck one of his comrades, but for this he was only condemned to a year's further imprisonment in the same place.

"Finding this method fail, he determined to adopt stronger means; and, one day, being in hospital, he violently kicked the surgeon who came to attend him.

"He was tried for this crime, and declared on his trial, that he had no sort of animosity against the surgeon, and that he only struck him because he wished to have a heavier punishment, which would enable him to quit the prison. Marin was, however, *condemned to death*, for striking his superior officer.

"It was generally hoped that the appeal which Marin made after his condemnation would be listened to, for he had been remarkable during his stay in the prison for his quiet conduct, and orderly laborious habits: besides, only a short time previously, a man in the same town (Rochelle), guilty of murder with the foulest premeditation (having stoned to death *his own brother*, who was screaming in vain for mercy,) had received a remission of his sentence, and been permitted to live.

"But poor Marin was in a military prison where insubordination was very prevalent and dangerous, and his appeal was rejected. On the day appointed for his execution, the 30th December, 1836, he was told to prepare immediately, and was marched a quarter of a league to the spot where he was to die. The people of Rochelle flocked to the place, and the *cortege* was very soon seen to arrive.

"Marin walked between two ranks of soldiers, a priest embracing him during the whole march; he was perfectly calm and tranquil, and absolutely gave support to the clergyman who was tottering and weeping by his side. When they arrived at the door of the cathedral, the condemned man knelt down and prayed for a few moments, and then marched on with a quicker step.

"Arrived on the ground, he saluted the troops assembled, and then quietly took the station pointed out to him, he asked permission himself to command the fire, but this was denied him; he then knelt down and heard his sentence read. When the captain read the words 'in the king's name,' Marin took off his cap and bowed. During this time the Abbé Courcelles was on his knees in the snow, praying fervently by the side of the condemned man. When the sentence was read, Marin rose and threw himself into the arms of the clergyman and kissed him.

"At the signal 'Make ready!' Marin raised his hand—the next moment he fell dead with his face towards the ground.

"The troops, and fifty of the convicts from Bellecroix, were then marched round the mutilated body; the people then retired from this spectacle, and you would not have known that anything had

happened, but for a few idle boys gathered round the bloody spot where the poor man fell."

Thus writes the Paris Correspondent of *The Constitutional:* and thus affords a striking instance of the inefficacy of sanguinary punishments; a conviction, impressed as it is on our own minds, constituting the only reason why we should not rejoice, if any unenlightened French Brutus should succeed in terminating the existence of Louis Phillippe, who has violated every principle of justice and humanity, of honour and of good faith, since he, by hypocrisy, obtained the title of the King of the French.

Not only are sanguinary punishments ineffectual in preventing crimes, but they have a tendency to develope crimes; a fact recognized in a French adage, "Une loi rigoreuse produit des crimes."

The reason is apparent. A man robs: for this death is the punishment. He sees the gallows before him: his cautiousness is called into a diseased activity. This arms his destructiveness: and cautiousness, from very fear, suggesting that the death of the individual robbed will remove one chance of detection, makes the robber to become a *murderer.* So that it will be seen that the very cautiousness, the activity of which, as awakened by the presentation of the gallows, is intended to restrain the man from crime, is the very organ which, by its activity, as thus awakened, becomes the parent of crime.

Sanguinary punishments foster crime by deadening the fine feelings of the human mind, and habituating individuals to cruelty; which habituation necessarily diminishes the motives to virtuous and noble acts, and hence produces a state of the public mind, which takes away any effect which the dread of the punishments might have had in inducing obedience to the law: for it is with the body *moral* as it is with the *physical* body, that the constant application of stimulus takes away the delicacy of sensibility, and requires a constantly increasing stimulus to excite the system to the requisite amount of action. The sight of blood may, by the frequency of its presentation, become no stimulus at all: and thus it is that sanguinary punishments, by habituating the mind to the strongest stimuli, take away any good effects which might otherwise be derived from them.

Another reason why sanguinary laws cannot be effectual is, that, as men advance in moral development, they will not, indeed cannot enforce them. For it is perfectly evident, that a man with large benevolence and large conscientiousness, deliberating calmly upon the conduct of a criminal who has robbed to the value of £5., or who has stolen a sheep, could never reconcile himself to the infliction of death for such offences, which he virtually does when he finds the individual guilty. His mind would as instinctively revolt from such a decision, as the animal farmer, with small benevolence and small conscientiousness, and immense self-esteem and destructiveness, would rejoice in the same. The intellectual powers of the former are exercised to discover any little point, which might throw doubt on the evidence; which might give him the least sanction virtually to violate his oath, in deciding contrary to the mass of

evidence. Criminals therefore continually escape. The uncertainty of the punishment produced a disregard of the law; because even cautiousness has ceased its forebodings: for no doubt can exist that the only way to render punishment effectual for the prevention of crime, so far as the appeal relates to cautiousness, a certainty that it will follow the commission of the crime must be felt by the individual.

As organization improves, laws must therefore lose their sanguinary character, because they cannot be enforced. Hence it happens that the laws, so sanguinary, which have disgraced the statute book of England so long, have been repealed, not because the legislators have improved in organization or intelligence, but because they found that the laws could not be enforced.*

Having thus endeavoured to demonstrate that criminal legislation has been founded upon the principle of *punishment* not *reformation;* that the means adopted have been the excitations of the animal feelings by appeals to the animal feelings, thereby strengthening the animal feelings themselves, the sources whence the offences arise, we have now to develope what ought to be the principle upon which criminal legislation should be founded, namely, the reformation of the criminal: and the means to be adopted with the view of realizing this.

What is *reformation?* The answer is, The *education of the moral and religious feelings so that they may gain a preponderance over the animal: or speaking phrenologically, that the back and inferior lateral portions of the head may be brought under the dominion of the upper portion.*

That this is a difficult task there cannot be any question. That reformation in our prisons is rarely attained, it is undeniable.

That it is a difficult thing to educate criminals all must allow. It is very difficult to educate children, even when taken from the earliest childhood. How much more difficult to educate a criminal: one who has been given up to vice, and who has earned a perfection in crime. In fact, so difficult and apparently unsuccessful has the

---

* This circumstance testifies to two things: namely, the importance of trial of jury: and second, the advancement of the middle class of society in organization compared with the upper class. It shows that trial of jury is the greatest protection that can be to a nation: that it is the grand safeguard against oppression: and that a nation can hardly be said to be free who does not possess it in some one form or another.

We have seen a pleasing instance of the power of trial by jury in resisting oppression in the decision of the Alsatian jury, who found the prisoners charged with treason for joining with Louis Buonaparte at Strasburg, to overthrow the government of Louis Philippe, not guilty.*

This shows that where a nation is qualified to be free, it is sure to obtain its freedom: because bad laws cannot be administered where good men have a share in the administration of them.

This also shows how all moral revolutions are brought about: that they are the result of the improvement of individuals: that no nation can be free unless the majority are virtuous; because, without this, there cannot exist the necessary intensity of desire for freedom sufficient to enlist the energies of the people to resist, by legal, or by moral means, the oppressor.

* Louis Phillippe had pardoned the principal criminal, young Buonaparte.

attempt been, that many have thought that it is labour thrown away: that "once a thief is always a thief:" and Mr. E. Gibbon Wakefield, no slight authority, asserts that the fact is certain, "that a thief is hardly ever—I am tempted to say never—reformed."

Ad mores natura recurrit
Damnatos, fixa et mutari nescia.

If, however, we call to mind the views already propounded, namely, that education consists in the drawing forth of the faculties: that this drawing forth is dependent upon the presentation of the proper food, it follows, that in order to reform a criminal, the proper food for drawing out his higher faculties, must be placed before him, and he must be excluded from the opportunities of being fed with improper food: and the very circumstance of his having become a criminal, gives society a power to exclude him from the latter circumstances, and to present to him the former.

Now let us examine how such an education can be realized.

A *prison* is the place where such an education is generally conducted; and a prison, properly conducted, is the only place where such an education can be properly conducted. It may be well, therefore, to define what we mean by a *prison*. A prison is a place which enables the individual imprisoned to realize a forced seclusion from the objects tending to excite his animal feelings. Viewed in this way, a prison becomes a seminary of virtue: and, placing an individual there implies that he has shown by his acts that his animal feelings are so powerful, that when surrounded by circumstances, appealing to them, they will break forth in violations of the dictates of the moral feelings: and, indeed, the criminal is to be viewed as a deranged patient, who, unable to restrain himself, when at freedom, is placed under restraint, until his moral health is restored.

In a prison, conducted with such objects in view, the objects tending to excite the animal feelings would be removed. No food to feed the animal feelings is presented. And although, after death, the unsubdued animal feelings may be the worm of desire that dieth not, and the fire of lust that is never quenched, yet, during life, we can have no doubt, as phrenologists, that by the removal of the food from these animal propensities, they can be so *starved*, they can be so nauseated, that the individual will be led to seek relief in the activity of the higher feelings. I say we can have no doubt on this point, because we know that casts of the same individuals taken at different times, have shown changes in the organization, correspondent to the alterations in the character, both for the better and for the worse: we also know that the mind must be active: we know also that to give gratification to the animal feelings, the objects exciting them must be present, or, at least, conversation, depicting such objects to the mind, must take place: these being excluded in a prison, the consequence is, that the mind needing, yea, demanding activity, is obliged to eat moral food, which it esteems worse than the crumbs that fall from the master's table:

but which, as nothing else can be obtained, the individual is obliged to take; and, at last, moral health is established.

What encouragement then Phrenology affords, by giving the physical demonstration that the cultivation of particular faculties causes the organs of these faculties to increase in size; and thus ensures the result that the persevering cultivation of the moral feelings will induce a *moral health*.

To realize this state of things, this total seclusion from objects, having a tendency to excite his animal feelings, it is evident the criminal must be kept separate from those, whose conversation might keep alive the activity of the animal feelings: because words, those winged messengers of thought, may feed his animal propensities almost as much as the objects themselves, represented by these words: a fact that every-day's experience testifies to.

But *total* seclusion would be a violation of his physical as well as moral nature. Man is a social being. The sight of his fellows is essential to health. How much does the addition of a human body add beauty to a landscape! And experience has proved that total seclusion, even with work, has been injurious to health. The question then occurs, how separation can be realized in company with others. The way, most effectual for realizing this, is by *perfect silence* being enforced: silence by *words*, and if we may so define, silence by *looks*.

Thus the stimulus of beholding human beings, the stimulus of working in the society of human beings, are gained without the corrupting effects of social intercourse between the depraved.

(To be continued.)

IRISH CLERGY.—JOHN MILTON.

How forcible and characteristic is the following description of the clergy of Milton's day, of some of the Irish itinerating rectors, who travel hither and thither, preaching against popery.

"A swash buckler against the pope, and a dormouse against the devil, while the whole diocese be sown with tares, and none to resist the enemy but such as let him in at the postern. Hypocrites! the gospel faithfully preached to the poor—the desolate parishes visited and duly fed—loiterers thrown out—wolves driven from the fold—had been a better confutation of the pope and mass, than whole hecatontomes of controversies, and all this careering with spear in rest, and thundering upon the steel cap of Baronius or Bellarmine."

OBSTINATE STUPIDITY.

A MAN endowed with large firmness, large esteem, and small ideality, benevolence, and the higher feelings, presents that obstinate kind of stupidity, well described by the poet,—

> "Cudgel-proof,
> And steadfast as the unchisell'd rock of flint,
> Regardless though the heavens' high marble roof
> Should fall upon their skulls, with mortal dint."

CIVIL AND RELIGIOUS OBEDIENCE. THE DISSENTERS AND ESTABLISHMENTS.

LORD ABINGER.—CHURCH RATES.

ESSAY V.

"Woe unto him that buildeth his house by unrighteousness, and his chambers by wrongs.

"That saith I will build me a wide house, and large chambers, and cutteth him out windows, and it is ceiled with cedar, and painted with vermillion.

"Shalt thou reign because thou closest thyself in cedar; did not thy father eat and drink, and do judgment and justice; and then it was well with him."—JEREMIAH.

THE clergy are rousing themselves—the straw is moving.

The uneasiness of the clergy, who are the riders, is a sign that the saddle is shifting, and that the girths are not quite so safe as the heavy troops would have them. When the clergy wince or roar the cause is favourable to the laity; and, in proportion as the clergy are noisy and bitter, is the excellence of that measure which they revile.

The people are moving with effect. In all the great towns, meetings—great in the number assembled, in the talent of the speakers, and the soundness and the strength of their cause, and of their arguments—have been held. In Manchester, the petition against the church rate impost has been signed already—we write this on the 23rd of January—by 36,000 persons; and at Liverpool, Newcastle, Brighton, Norwich, Ipswich, Chatham, and innumerable other populous and intelligent towns, similar petitions have been passed, or are in progress.

The clergy are alarmed, and have started a new Quarterly Review, entitled *The Church of England Quarterly Review.*

Their first paragraph in their introductory article furnishes a characteristic example of clerical cant, mixed with abuse and bitterness, the usual ingredients in clerical controversy; but this article also evidences much fear and alarm for the flesh pots. Here it is.

"After much serious thought, devout meditation, and earnest "prayers for the Divine blessings upon our undertaking, we institute "a crusade against the triple alliance of infidelity, liberalism, and "papistry, by putting forth the first number of *The Church of Eng-*"*land Quarterly Review.* We prefer our claims to public patron-"age with confidence, but in the spirit of humbleness and sincerity. "Neither envy nor gall, nor list to enter into controversy, nor, "least of all, any vain glory, hath moved us, but the strong urgency "of the times, the enforcement of conscience alone. We have "searched many books, we have spent many thoughtful hours, and "our studies have brought weariness and disquiet: our contempla-"tions have been poisoned and perverted at their very source. "God's blessings have sprung up out of our mother earth before our "eyes, and our hearts have not showed forth his praise, nor could "we eat our own bread in peace and content for the perturbation of "our inward soul. We would willingly forget ourselves in the "lethargy of literary solitariness, but the stillness of our leisure is "struck by the hoarse echoings of changes, which are occurring in "'a world we love, alas! too long;' and our repose is saddened by

" the lengthening shadows which the advent of night and storm " casts on our retirement. Indeed, knowledge is rendered worse " than ignorance, owing to the awful moral confusion, *the rudis* " *indigestaque moles*, in which the misgivings of the human race, " the fundamental principles of philosophy and religion, seem to us, " for the first time since the dawn of civilization, thrown back and " involved ;.... ' chaos is come again.' "

Now this really means what the last portion of the paragraph says, that knowledge in the people is worse than ignorance for the clergy.

It is an enemy to tithe-barns and forced exactions in the name of religion.

The " misgivings of the human race," is another mode of saying the people entertain great doubts of the value of state bishops, and a heavy hierarchy ; and when they say, the " fundamental principles of philosophy and religion seem to them thrown back and involved," for philosophy and religion read tithe-barns, and church rates.

The newly baptized lawyer and aristocrat, once called Scarlett, now called Lord Abinger, has taken an opportunity, when trying an action for a libel, to run out of the record, and to pronounce resistance to church rates to be the " idlest and silliest" thing in the world. He forgot that *he* is still spared to us.

We think it will, therefore, be well to say a few more words on the subject of resisting bad laws ; and particularly of resisting, by all peaceable means, those laws which interfere with religious equality and the right of private judgment.

Non-conformity to a bad law is no sin ; and, if the law violates a religious conviction, conformity would be sinful, because religious obligations are superior to conventional or human obligations. In religious matters each man is bound to think and act for himself; and society, though it assumes the *power* to restrain religious freedom, violates *right* in so doing. The only human laws, justifiable in religious matters, are laws to prevent men from interfering with the religious freedom or religious enjoyment of each other, which in effect are laws to secure, not in restraint of, religious freedom.

Were the puritans, before the passing of the toleration act, guilty of sin in resisting the law passed by the episcopal sect to crush them ? Assuredly no. But if they were justified in non-conformity, the episcopal sect and all who passed and supported the law, called the act of uniformity, were sinners. Those who make—not those who break—an unjust law, are the sinners. There is a right and a wrong side of every question, and in matters of religion involving principles, no questions can be indifferent.

If the non-conformists were right the established sect were wrong: the justification of the one is the condemnation of the other; if that one sect is right in invoking worldly power to enforce unwilling support, all other sects are wrong in withholding their contributions: a religious duty involves the obligation of willing obedience, but human laws, only create penalties and add worldly motives to conformity.

Those who claim exemption from any duty common to all, are charged with the obligation of showing the ground of the exemption, and justifying its reasonableness.

The episcopal sect claim to be exempted from bearing the expence of that public worship of God, which they profess to feel incumbent upon them.

They ought therefore to justify their claim to exact unwilling support from others.

But they content themselves with saying, "We have a law, and by that law, Dissenters ought to be given to the jailors, or their chattels to the brokers."

So said the chief priests of old, when they crucified the Lord.

If the argument did not justify the crucifixion of the Saviour, it will not vindicate the bloodshed of his disciples.

In what respect will the murderers of the Lord, and those at Rathcormac, differ at the Judgment Day?

The worship of God by his creatures is a duty incumbent equally upon each and all; and it is not assuming too much to say, that that worship which is not offered of an upright heart and from a willing mind, cannot be the worship of the spirit and of truth, which we have the most sacred authority for saying the Father seeketh.

In arguing a religious question of this character, it is well to bring to view the presence of God, the object of worship; that view adds just solemnity to the subject, and keeps the proper considerations before the mind's eye of the creature in determining his duty.

Suppose, therefore, at the moment when two worshippers were about to supplicate the Father of Mercies, one of them should offer in simplicity, and without an altar or a shrine, the outpourings of an humble and a contrite heart, but that the other desiring not only altar and shrine, but choristers, organs, organists, pew-openers, hassocks and cassocks, fires and cushions, and all the appliances of outward show and luxurious ease, should insist upon his fellow-worshipper paying for these, his worldly and human additions to a mental offering; and, that, having the power, he should send his fellow-creature to a jail for not paying this demand; would this man, even though he could say, "God, I thank thee that I am not as other men are; I fast twice in the week, I give tithe of all I possess," go down to his house justified?" Judge ye. Would he not rather need to offer the humble supplication of the publican, "God be merciful to me a sinner."

This case is here put to illustrate and carry forward the argument: Unfortunately it is not a suppositious case, but one of daily and hourly occurrence; for, if the jails are not full of Dissenters, it is not owing to the forbearance of the rulers of the dominant sect, but to the weakness, the lukewarmness, and the want of unity of the other sects: every payment made is a worshipper redeemed from jail.

The law, by which protestants were burned by catholics and catholics were burned by protestants, did not justify those who burned them; they obeyed the law, and yet they committed sin. "We have a law," said those who crucified the Saviour, "and by "our law he ought to die." Such laws are nothing more than unholy compacts, by which the law makers resolve that force shall be exerted to obtain or produce the submission of its members; but the fitness of the end is altogether independent of the law, that is, of the power used to enforce or produce it.

When the law of the land and the law of God are opposites, it cannot be doubted that the law of God should prevail; and this holds equally where we may, even erroneously, *think* the law of God, and the law of the land, are opposed to each other.

If it were not so, slavery in the United States, being according to law, ought to be submitted to, and Wilberforce and Clarkson, and those who exerted themselves to obtain its abolition, ought to have abstained, if its being a law made it morally right. If law sanctifies what it enacts, men commit a moral sin in seeking the repeal of that which is sacred, and slavery is justified because slavery is enacted.

Human laws are but the expression of the will of the strongest: they prove nothing, they sanctify nothing.

Law is a rule of action prescribed by power, but the *justice* of a rule declared by man is wholly independent of the rule itself. It is a law in the United States of America that a slave shall not be taught to read, and that the freeman who teaches him shall be imprisoned and ultimately banished; but, though a law, it is a wicked one, and the wickedness of it being obvious, we adduce it to prove that it is not sinful to break any law, as a law. If it be sinful to violate a law, it is because the law is consonant with justice and morality, and then the sin of disobedience is raised because it violates those higher considerations.

It would be the duty of Dissenters to resist this rule, however moderate the established sect might be in enforcing it. Charity to those from whom justice is withheld, is only refined injustice. It is not because a slave has a kind master that slavery is less odious in principle, or that resistance would therefore be rendered unjustifiable. The kindness might diminish the disposition to resist, but not the justice of resistance; nor the duty on the part of a parent towards those who are to come after them.

It is no objection to this reasoning, that it makes every man a judge in his own case; because so to judge is the law and obligation of God upon him, for "God shall bring every work into judgment "whether it be good or whether it be evil;" and he, who declared that the Father sought the true worshipper and the worship of the spirit and of truth, also declared, "He that receiveth not my word "hath one that judgeth him, the word that I have spoken; the "same shall judge him in the last day." To God he must answer. His Maker has cast individual obligation upon every created being. Religion is a personal obligation,—it is between the Creator and the creature, and cannot be deputised.

The reasoning of Dr. Paley, cited in a former article, p. 97, No. IV. vol. 2, is full and conclusive on this head; and, though his work is the text book at the Universities of Oxford and Cambridge, yet are the clergy of the church of England the most loud in pronouncing it sinful in men to oppose, by lawful and by peaceable passive submission, the obligation to build altars and support buildings, in which what they think false worship is offered.

The will of God declared, is the law of God enjoined. It is from the moment it is known of paramount obligation, it is binding upon all sects and upon every man, "for we shall all stand

" before the judgment seat of Christ ;" for it is written, " as I live, " saith the Lord, every knee shall bow to me, and every tongue " shall confess to God,—so then every one of us shall give account " of himself to God." *

" Whatever moderation or charity we may owe to men's persons " we owe none at all to their errors, and to that frame which is built " on and supported by them." †

An erroneous law is but an incorporated error: the more grievous because consolidated, but unless it could be successfully contended that men are bound to obey and act upon their neighbours erroneous, or what they think to be erroneous, convictions, it cannot be pretended that the moral or religious obligation to do so would be strengthened, if those neighbours had influence sufficient to get an act passed enacting their opinions into a law; the dissidents might be then compellable, or be made to suffer the penalty, but the truth and the equity of the case would remain unchanged.

Darius, in the case of Daniel, was warranted by the law of the land in what he did, but was he religiously or morally justified? The interposition of God supplies both a conclusive negative in that case, and a justifying analogy against force in any case, though we use it only as illustrative of the distinction we are pointing out, namely, that a human law, as such, is not a moral or religious obligation. Such obligations exist independently of the embodied human power, called the law; and flow from higher considerations, the law or will of God.

When the episcopal sect ejected from its communion all those of its ministers, who were too honest to sacrifice their consciences to their livings, and passed the five mile act, the effect of which was to starve those whom interest could not corrupt, they, and not the sufferers, were the sinners.

When, having changed by violence the national religion, they passed a law, that every person who should not resort to his parish church or chapel, or to some place where common prayer should be used, on every Sunday and holiday, should forfeit all his goods and lands, should not enjoy any public office, or be executor, administrator, or guardian, or being present at any other assembly for the exercise of religious worship, should abjure the realm, or should suffer death,—those who made and passed such laws were the sinners, and not those who broke them.

When the sect by law established, enacted that such as should refuse to swear that it was unlawful " to take up arms against the " king, or against those that are commissioned by him, AND THAT " THEY WOULD NOT AT ANY TIME ENDEAVOUR ANY ALTERATION OF " GOVERNMENT EITHER IN CHURCH OR STATE, should be incapable " of teaching any public or private schools, or of taking any boarders " to be taught or instructed," will it be contended, that the worthy and good ministers, who had yielded their livings rather than violate their consciences, were bound to abstain from teaching the religion they believed to be true, and to starve and die in obedience to so wicked a law. Those who conformed contrary to their con-

* Paul. † Bishop Burnett.

victions were hypocrites, and those who resisted such laws were just men, so far as that resistance was concerned.

Lord Abinger would doubtless pronounce them to be idle and silly men for having a conscience,—that is, if his lordship should act consistently with his dicta in Bond *v.* Douglas.

Our disinterested friends of the "Church of England Quarterly," are much troubled at the indisposition of men no longer to take things upon trust, thus they speak:—

"What have heretofore passed current as axiomatic truths, and "have been looked upon as the instinctive opinions of mankind, "are no longer received upon trust, but set afloat upon a troubled "sea of doubt and conjecture. Men hesitate, and ask themselves "what they should believe, and what not? The powers of light "and the powers of darkness are struggling for the mastery. The "prize is the human soul; and antagonist prejudices of every kind "are being sifted and bolted to the bran." And why not?

Of course the clergy intend their readers to understand that they belong to the "powers of light," and that the powers of darkness, that is, those, whoever they may be, who will not take things "upon trust," are seeking to throw a wet blanket over their reverences. We are constrained to show how these "powers of light," have dealt with the Scriptures, the source of light, and life, and truth.

When the translation of the Scriptures, which is called the authorized or received translation, was ordered by the man, whom his bishops called "the high and mighty prince James," he and his council, principally the aforesaid bishops, issued, amongst others, these directions.

"1. The ordinary Bible read in the church, commonly called the "Bishops' Bible, to be followed and as little altered as the original "will permit.

"2. The names of the prophets and the holy writers, with the "other names in the text, to be retained, as near as may be, accord-"ingly as they are vulgarly used.

"3. THE OLD ECCLESIASTICAL WORDS TO BE KEPT, AS THE WORD "CHURCH NOT TO BE TRANSLATED CONGREGATION."*

They knew it would not do to allow things to be called by their right names; that, if they permitted the sense of the scriptures to reach the people, the wickedness of sacrificing their religious equality to episcopacy, and the greater wickedness of seeking the union of religion with the institutions of this world, would not be of long continuance.

They understood the value of blind terms to them, for they knew the value of ignorance to priestcraft; they knew that blind terms would thicken the blanket of their safety; and they especially knew that if the word church was translated, it would be impossible to disguise from the people the palpable absurdity of the worldly union, which tyranny, hypocrisy and cupidity had induced.

They had made this Solomon of princes believe, that, "No bishops, no king," was an axiom; and, when the exertions of the

* Burnett, Neale, Horne.

reformers, and the translations of the scriptures by the persecuted non-conformists, had produced an earnest desire in the people for the perusal of the scriptures, they saw that, unless they could get a translation established with the necessary blinds in it, to intercept the light which a true translation would have given to the people upon the nature of a christian church, it would soon become evident that there are no such things authorized by the scriptures as established churches or Act of Parliament bishops.

THEY WOULD NOT, THEREFORE, ALLOW THE SCRIPTURES IN MATTERS WHICH CONCERNED THEIR WORLDLY PELF, TO BE TRULY TRANSLATED.

They were of opinion that it was not given unto the people to know the mysteries of the kingdom of heaven, lest by enquiring into the scriptural authority for bishops, and finding none, they should say, these bishops' hearts are waxed gross, their ears are dull of hearing, and they teach for doctrine the commandments of men.

The word church in Hebrew means *congregation;* in Greek *assembly.*

All the great and glorious promises, which we read of in the scriptures, are made to the PEOPLE, and not to a spiritual hierarchy; to a selfish incorporation of scribes and pharisees. Any one who will take a concordance, turn to the word church, and read the word people for church, wherever the latter word occurs, will see at once the noble and generous principles which would have been infused into the universal mind, if the word had been faithfully translated; they will see how powerfully humanity would have been aided to overthrow the delusions of priestcraft, and to avoid them in future.

Take one of the earlier instances in which the word occurs in the New Testament: "Upon this rock will I build my church." Call to mind the superstructure of spiritual tyranny and oppression, which the church of Rome reared upon that untranslated word, and then read the passage with that word, "upon this rock (i. e. the admission of the Messiahship) will I build my church," translated "people" or "assembly," and all the pretences for the assumptions of the church of Rome, founded upon this passage, which have harrassed and destroyed the beings who were intended to be blessed by the gospel, is cleared away.

Call to mind the interminable and bitter disputes as to the true church, and then imagine the term church to have been translated, and the cause of dispute would not have existed. It would have been seen that the expression "Church of God," imported any assembly or congregation of men, worshipping one God. But the true translation of this word would have prevented the appropriation of the good things of this world to the clergy. Tithes, if paid at all, would have been wholly paid TO THE PEOPLE; the poor would have been blessed with the tenth of the produce of the land, and the clergy would have had no colour for seizing the tithes from the poor under the guise of this mystic, because untranslated, word.

The holy Huberts, having thus put out the eyes of the scriptures, the Solomon who had thus enabled them, by a tricksy word, to defy the matter, was in return lauded in the following style by these subtle priests:—

"*To the most high and mighty prince James*,

"Great and manifold were the blessings, most dread sovereign, "which Almighty God, the Father of all Mercies, bestowed upon us "the people of England, when first he sent your majesty's royal "person to rule and reign over us. For whereas it was the expec- "tation of many, who wished not well TO OUR SION, that upon the "setting of that bright occidental star, Queen Elizabeth, of most "happy memory, some thick and palpable clouds of darkness would "so have overshadowed this land, that men should have been in "doubt which way they were to walk; and that it should hardly "be known, who was to direct the unsettled state; the appearance "of your majesty, as of the sun in his strength, instantly dispelled "those supposed and surmised mists, and gave unto all that were "well affected, exceeding cause of comfort; especially when we "beheld the government established in your highness, and your "hopeful seed, by an undoubted title, and this accompanied with "peace and tranquillity at home and abroad."*

Thus having secured the flesh pots of Egypt by shutting the door against light and knowledge, they commenced to chaunt the right divine of kings to govern wrong, a fitting chaunt for those who had tied religion to politics in return for the tithes of a nation, secured to the priests of a sect.

For a set of men so disguised under the name of a church—for a priesthood adopting the same visor, and clutching the same spoil—church rates are now upheld; and the judges travel out of the road to bespatter one of two parties whilst the cause is in judgment. It was said of a certain leading counsel, when at the bar, that his general temper and his smiling acting before a jury were sad opposites; but it is satisfactory to observe how agreeable a judge we have in Lord Abinger, he never allows his temper to run away with his judgment,—he is judicially blind to the individual opinions of the parties, and goes not beyond the issue which is joined, and which the parties equally pay him to try.

Whilst we have such glorious and tenacious priests, as are those of the established sect,—whilst their flesh pot appetites continue so ravenous, as they have shown themselves for church cess and tithes in Ireland; and for church rates and tithes in England; and whilst they have such cool and equable judges as this newly baptized aristocrat; whilst we have such parsons and such judges, we have good ground for anticipating the dissolution, by legal means, of the connection between the favoured sect and the aristocracy; a connection, by which a people are despoiled of their religious liberty, and their property, to provide livings for the tutors, the younger sons, and left handed relations of that aristocracy. We say we have good ground to hope under such circumstances for speedy relief, because if the dominant party excite disgust as well as a sense of oppression, their defeat will be greatly accelerated.

E. SEARCH.

(To be continued.)

---

* Dedication prefixed to the Scriptures.

ADDRESS

Delivered at the first Anniversary Meeting of the Anthropological Society, by the President, JOHN ISAAC HAWKINS, *Feb. 2nd,* 1837.

MY DEAR FRIENDS,—You have just heard our worthy secretary read the report of our first year's proceedings, in reference to the nature and the aims of the Society, the number of members, the accumulation of property, and the arrangement for promoting our animal comfort and accommodation; from which report we have reason to congratulate ourselves, that, for so young a body, with only moderate contributions, we have laid a promising foundation for a useful and stable Society, as far as physical circumstances are concerned.

But, as the usefulness and the stability of any society must depend on the intelligence of its members, and upon the spirit in which they conduct their discussions, it may be profitable for us to take a higher view; and to examine our intellectual, moral, and religious proceedings, during the first year of our social existence.

In reviewing our intellectual transactions, it is highly gratifying to recollect that a great number of excellent papers have been read from time to time at our meetings, on subjects of the highest importance, throwing much light on the constitution and the capabilities of man; frequently giving rise to interesting discussions, in which some very luminous views have been elicited, greatly adding to our knowledge of the modes by which the condition of man is to be improved.

In contemplating our moral conduct, we have the pleasure of knowing that all our meetings have been signalized by abundant evidence of kind and liberal feeling.

There has been no disposition manifested, on the part of any member, to carry a point against the feelings of any other member; whenever a disagreement in opinion has arisen, the spirit of mutual forbearance has so attempered the discussion of it, that the most harmonious termination of the differences has ensued. The spirit of enquiry has prevailed, and the spirit of dictation has found no place amongst us; and we hope it never will be permitted to enter and infect our meetings with its baneful influence.

But it is in taking a retrospective view of our religious proceedings, that we have the greatest reason to rejoice, for we have exhibited the novel and interesting spectacle, (and I have great pleasure in recording the fact,) of from fifteen to thirty persons, professing, perhaps, a dozen different creeds, meeting together nearly forty times, with the full privilege, according to the constitution of the Society, of broaching any religious views, and bringing them to bear on Phrenology, and on the nature of man, and yet there has not been a single instance of the necessity for my calling any member to order on account of any endeavour to press his peculiar dogmas on the meeting; no case has occurred of offence being taken by the professor of one creed, at any expression of the professor of a creed usually deemed opposite to his. All the discussions have been carried on with the most gentlemanly feeling,

or what is the same thing in reality, with truly christian charity; for true christian charity is the most gentlemanly of all feelings.

The prognostications, therefore, of those who foreboded our speedy dissolution, from the supposed impracticability of discussing religious subjects upon any other than narrow sectarian principles, without producing such jars as must shake the Society to its foundations, are not yet fulfilled; and, to all appearance, are ten times farther from fulfilment than might have been calculated on at our commencement.

It may be well to enquire into the grounds of this harmony of feeling.

By close investigation we shall discover that it is owing, firstly, to the age we live in; and secondly, to the noble science of Phrenology; the study of which tends to humanize and to christianize our feelings, by the light it sheds on our views of the constitution, powers, and tendencies of the human mind.

Firstly, much of the harmony we have experienced is derived from the spirit of the age; which is manifestly a spirit of increased and increasing liberality. This spirit is not confined to these realms, nor to Europe and America; there is a universal outpouring of its benign influence all over the earth.

A great moral revolution is going on throughout the world. Bigotry and sectarianism are rapidly yielding to liberal and enlightened views in religion and politics, in moral, as well as in natural philosophy. In the course of the year, in which we have so happily met together, we have received tidings of the establishment of a newspaper at Constantinople; and of another in the Sandwich Isles. The thin edge of the wedge is thus introduced in both those countries: and in various other parts, in forms innumerable; we know some of the consequences; the wedge must be driven home, and shiver to atoms, and give to the winds, the elements of despotism, in all its hideous forms, until the divine purposes be accomplished, in the liberation of the human mind from the bondage of animal domination, under which it has groaned for so many ages.

The state of the mind of man, considered universally, that is, viewing the human race as a whole, must, of necessity, have a similar progress to that of the state of an individual mind; that is to say, it must have its infancy, childhood, and youth; and, at length, arrive at maturity.

The history of man indicates thas he *has passed* through his infantile state of innocence and simple dependance on his heavenly Father, represented in the scriptures by Paradise, and, in the writings of the poets, by the golden age; that he has also *passed* through his state of childhood, in which self-will begins to be developed and to require restraint under mild guidance, represented in scripture by the expulsion from paradise; and in the histories of the succeeding ages, a state called by the poets the silver age.

And that man has *passed* through the state of youth, the age of turbulence and insubordination, is represented by the history of the Hebrew nation, down to the time when the Saviour came to signalize the maturity of the human race, and to open and instruct the rational powers of man, and prepare him for a long life of wisdom and useful-

ness. This state of youthful turbulence and insubordination, is called by the poets, the copper age.

The progress of the human race to this period, was a continual descent from a state of innocence and simple dependance upon his Maker, down to the lowest degree of animal sensuality, intellectual blindness, and moral depravity.

Such also is the usual progression of individual man through his stages of minority; and he takes his station in society, when he comes of age, with his animal propensities in full dominance; commencing his career by abundantly sowing his wild oats, and reaping their fruits in the form of severe suffering, until, at length, his reason begins by degrees to be awakened, and to produce reflection and inquiry, by which he procures information, whereby the intellect is enlightened and strengthened, until it acquire force sufficient to apply for the aid of the superior moral and religious powers to bring the animal propensities into subjection, and by this process to become an orderly man; called in scripture a *new man;* the old man being put off with his deeds.

By a similar process it would appear that the universal man, the human race, since he came of age, has been sowing his wild oats for about 1800 years; and reaping the fruits in the form of the unnumbered evils, which afflict the world. This period is well represented as the iron age.

And now, for the first time since the creation of the world, the multitude begin to reflect and to inquire; the consequence of which, let us fondly hope, will be speedily manifest in their acquirement of intellectual light to direct them how to obtain moral and religious warmth, that the heart and the head may co-operate in the regulation of the concupiscences of the flesh; and man universally become, what his Creator in his merciful providence designed him to be, a promoter of peace on earth and good will to man.

It is admitted, that a few individuals in all ages, have thought and acted in an orderly manner; but they have really been "few and far between." Nothing at all to be compared with the spirit of liberality and rational inquiry which distinguishes the present age, has ever before appeared in the world.

The history of past ages abounds with disgusting accounts of contentions for animal domination. Brute force has usurped the throne, and assumed the judgment seat; trampling justice under foot, and turning mercy out of doors, in almost every country on earth. Might has universally overcome right, and rarely indeed has moral and intellectual worth been allowed to bear sway in the affairs of mankind. The tyranny of animal propensity always sacrificing everything lovely, beautiful and useful, to lawless, present, selfish gratification.

No reader of the past and observer of the present can possibly deny these statements. The facts are glaringly obvious, even to very obtuse intellects. But the tide of brute force has nearly finished its ebb; and a flood of intelligence is seen creeping along the shore, indicating a speedy rise of the tide, which shall float off, and carry upwards, into a serene and peaceful haven, the numerous

barks freighted with imperishable riches, which are now aground upon the shoals of prejudice, error, and sensuality.

These considerations make good our first point, that the numerous harmonious meetings of the professors of so many conflicting creeds is partly derived from the *spirit of the age*.

Let us now proceed to inquire, in what way the second point is made out, namely, that the harmony of feeling which we have so happily experienced, notwithstanding our various apparently discordant confessions of faith, is partly owing to the noble science of Phrenology.

And Phrenology is indeed a noble science, because it explains the "*noblest work of God.*" Phrenology is the science of the correspondences between the susceptibilities, the propensities, and the powers of the human creature, and the forms of the various organs; according to which those dispositions are manifested.

And when Phrenology is enlightened by divine revelation, it affords much insight into the formation of the mind itself.

It explains the inconsistent and contradictory character of man. It does more: it teaches us how to correct his inconsistencies and contradictions.

Phrenology explains a multitude of Scripture difficulties and apparent contradictions, by showing that revealed truth is addressed severally, to the various feelings, propensities, and faculties of man; each separately requiring encouragement, by exhortation and promises; restraint, by threatenings; and direction, by the various modifications of precept and example, which are so beautifully expressed in the sacred scriptures, in an infinite variety of forms.

A passage or two addressed to each faculty, feeling, or propensity, shall be here adduced.

Veneration .... "Thou shalt have no other God before me."
"Thou shalt not take the name of the Lord thy God in vain."
"Thou shalt love the Lord thy God with all thy heart."
"Honour thy father and thy mother."
"Remember the sabbath-day, to keep it holy."

Benevolence .... "Thou shalt love thy neighbour as thyself."
"By this shall all men know that ye are my disciples if ye love one another."

Firmness ..... "Resist the devil and he will flee from you."
"Be stedfast, immovable, always abounding in the work of the Lord."

Hope..... "Hope thou in God."
"The hope of the hypocrite shall perish."

Imitation ..... "Learn of me, for I am meek and lowly in heart, and ye shall find rest unto your souls."

Marvellousness.. "I saw a great wonder in heaven."
"Great and marvellous are thy works, Lord God Almighty."

Justice ..... "Just and true are thy ways, O thou King of of Saints."
"Do justly."

Ideality	" Break forth into singing, ye trees of the field."
	" Israel is an empty vine, he bringeth forth fruit unto himself."
	" I am the true vine."
Comparison	" Judge not according to appearance, but judge righteous judgment."
	" He spake these things in parables."
	" Without a parable spake he not unto them."
Eventuality	" For I brought you up out of Egypt with a mighty hand."
Individuality ..	" And he brought them to Adam to see what he would call them."
	" Thou art the man."
Causality	" Why will ye die, O house of Israel?"
	" Because I live ye shall live also."
Conclusion, and hence Joy	" And he shall bring forth the headstone, *shoutings*, Grace, Grace, unto it."
	" And all the people shall say, Amen."
	" Rejoice and be exceeding glad, for great is your reward in heaven."
Locality	" I will bring you into a land flowing with milk and honey."
	" In my Father's house are many mansions, I go to prepare a place for you."
Time	" All my times are in thy hands."
	" For a time, times, and half a time."
	" Bless the Lord at all times."
Harmony	" I will sing unto the Lord because he hath dealt bountifully with me."
	" O sing unto the Lord a new song."
	" Sing unto the Lord with the harp; with the harp and with the voice of a psalm. With trumpets and sound of cornet make a joyful noise before the Lord."
Form	" And the earth was without *form*."
	" What form is he of?"
	" He that *formeth* the eye, shall he not see?"
	" I form the light."
Size	" Let no man despise the day of small things."
	" With whatsoever measure ye mete, it shall be measured to you again.
Force, or Weight	" Ye omit the *weightier* matters of the law."
	" Thou art weighed in the balance and found wanting."
	" Thou shalt not have in thy bag divers weights, great and small; but thou shalt have a perfect and just weight."
Colour	" For in the hand of the Lord there is a cup, and the wine is *red*."
	" Though your sins be as *scarlet*, though they be *red* like *crimson*."
Order	" I am the first and the last."

	"He that cometh after me is preferred before me."
Language	"Let your communications be yea, yea, and nay, nay, for whatsoever is more than this cometh of evil."
Number	"The very hairs of your head are *numbered*."
	"He was *numbered* with transgressors."
Self-Esteem	"Therefore all things whatsoever ye would that men should do to you, do ye even so to them; for this is the law and the prophets."
	"He that humbleth himself shall be exalted, and he that exalteth himself shall be abased.
Inhabitiveness ..	"I will dwell in the house of the Lord for ever."
	"Lord I have loved the *habitation* of thy house, and the place where thine honour dwelleth."
Philoprogenitiveness	"Can a mother forget her sucking child, that she should not have compassion on the son of her womb."
Love of Approbation	"How can ye believe who receive honour one of another, and seek not the honour which cometh from God only."
	"For they loved the praise of men more than the praise of God."
Cautiousness ..	"Watch and pray that ye enter not into temptation."
	"Be wise as serpents harmless as doves."
	"Beware of false prophets who come to you in sheep's clothing, but inwardly they are ravening wolves."
Secretiveness ..	"Let not thy left hand know what thy right hand doeth."
	"The *secrets* of all hearts shall be revealed."
Acquisitiveness .	"Lay up for yourselves treasures in heaven, where neither moth nor rust doth corrupt, and where thieves do not break through nor steal; for where your treasure is, there will your heart be also."
Attachment	"Behold, how he loved him."
	"I am distressed for thee, my brother Jonathan: very pleasant hast thou been unto me: thy love to me was wonderful, passing the love of women."
Combativeness..	"If my kingdom were of this world, then would my servants *fight*."
	"The Lord shall fight for you, and ye shall hold your peace."
Destructiveness .	"Prepare war, wake up the mighty men, let all the men of war draw near; let them come up: beat your plough-shares into swords, and your pruning-hooks into spears."
	"But the Lord thy God shall deliver them unto thee, and shall destroy them with a mighty destruction, until they be destroyed."

	"Thou shalt not kill."
Alimentiveness .	"Whence shall we buy bread that these may eat."
	"Your Father knoweth that ye have need of these things."
Amativeness....	"So God created man in his own image, in the image of God created he him; male and female created he them; and God blessed them, and God said unto them, Be fruitful, and multiply, and replenish the earth."
Constructiveness.	"Upon this rock I will *build* my assembly, and the gates of hell shall not prevail against it."

These few quotations may serve to intimate to us what an immense fund of phrenological materials there is in the Scriptures, and may induce the desire to have a phrenological commentary upon the Bible; which might give us a new view of the injunction of our Saviour, "Search the scriptures, in them ye think ye have eternal life, and they are they which testify of me." We might then see that they testify of him as the head of the church, and that all his attributes as that head, are by correspondence represented in the human head, where all the powers and faculties of the human mind congregate for the direction of individual operation.

Since writing the above extracts from scripture, I have learned with great pleasure that our worthy secretary has given a similar view in his work, intitled "Internal Evidences of Christianity, deduced from Phrenology," and quoted several passages in illustration of it.

It would sound very harsh in the ears of many pious people to be informed, that *without Phrenology they cannot understand the Scriptures;* yet, an assertion so astounding may, upon examination and reflection, be found to possess a great deal of truth.

As the shining of the natural sun gives no apparent light unless it fall upon something earthly, so the spiritual sun, the sun of righteousness, can communicate no spiritual light to our minds until ground be properly prepared to receive its rays.

The science of Phrenology is well adapted to break up the fallow ground, to open a large field; to present a broad surface, which, when the rays of the sun of righteousness shine upon it, may be expected to produce a rich variety of intellectual flowers, and an abundant harvest of moral and religious fruit; tending to the advancement of the human race into a state of rationality, intelligence, and wisdom.

As spiritual science is imperfect without this natural science, being like a soul without a body; so Phrenology, though supereminent among the natural sciences, is imperfect without spiritual science, being like a body without a soul.

This Society, therefore, having been founded on the union of the spiritual science of man, as derived from revelation, with the natural science of man, as derived from Phrenology, has taken a pre-eminent station in the foremost ranks of the promoters of human improvement, and onerous duties devolve upon its members, as a consequence of the position it has assumed.

Enlightened Phrenology exposes to view the springs and motives of human action, which, upon every other system of mental philosophy, are enveloped in profound mystery.

Phrenology is a mighty engine, calculated to raise man from the degraded state of animal life into which he has sunk; and to place him on the road to a higher state, by awakening his intellectual faculties, and stimulating them to procure light for the guidance of his moral powers, in subduing the animal propensities.

Phrenologists, clearly perceiving that every one must think according to his organization, are naturally led to indulge a charitable feeling towards all men, and to pay that respect to the opinions of others, which will enable them to listen with patience to doctrines which oppose their own.

Here, then, we have the second ground of our harmonious meetings clearly deduced from the natural tendency of the science of Phrenology.

It has heretofore been imagined that permanence could not be given to any society, that conversed on religious or political subjects, except it were bound by a peculiar creed; hence men have congregated principally in sects and parties, and spent themselves in labouring to discover and to discuss differences. The prevalent inquiry respecting another was, in what does he differ from us? And if he was found to differ only in one point out of a hundred, the ninety-nine points of agreement* went for nothing.

Now happily, we are more disposed to inquire after the points of agreement; and to let the differences go for nothing. And this is an immense stride in the march of improvement.

We have found by miserable experience, that the ferretting out of differences is pregnant only with discord and animosity; while, happily, the searching after agreements proves to be prolific of concord, peace, and goodwill.

Phrenology is in strict accordance with genuine christianity, being nothing else than the science of the harmonies of creation in the noblest part of the noblest work of the Creator; his own image and likeness.

These few observations thrown hastily together, amidst the turmoil of pressing and complicated business, and presented to you in all their native crudeness, may serve to encourage us to persevere in the road we have chosen; well assured that important benefits to generations yet unborn, will arise out of our proceedings, if we judiciously follow out the principles upon which the Anthropological Society has been founded.

---

* I once only, about 30 years ago, went to a meeting of the free-thinking christians; the greater part of the time of the meeting was taken up by five or six speakers, in exposing, condemning, and almost abusing the unitarians. on account of some minor differences which existed between the two sects; notwithstanding both sides agreed as to numerous leading doctrines.

This surprised me greatly, because I was led to infer from the designation they assumed, that they would leave others to think freely as well as themselves, without censure.

It is to be hoped that these free-thinking christians, are among the foremost in imbibing the spirit of the present age, and that now they would regard the unitarians, as well as all other sects, with more liberality.

SPINAL DEFORMITIES.

To the Editor of the Anthropological Magazine.

Holles Street, Feb. 8th, 1837.

Dear Sir,—I have shown in former letters that the articulations of the vertebræ are numerous; and so connected by ligaments, that each of them allows of some motion on every side. Hence it follows, that the centre of action is changed in the different positions of the trunk. When we bend forward, the upper moved part bears entirely upon the bodies of the vertebræ. (See the description of vertebræ, No. 1, Vol. II.) When we incline backward, the oblique processes support the whole weight. If we bend sideways, we rest upon the oblique processes of the same side, and part of the bodies. In the erect posture all the bodies and oblique processes contribute equally to our support.

It therefore follows :—1st. That, although the joints, composing the spine, are numerous, the spinal marrow, nerves, blood vessels, &c., are in less danger of being compressed and over stretched, than they would otherwise be, since several vertebræ are concerned in every motion of the spine, and therefore a smaller curvature is made at the junction of any two vertebræ.

2nd. That an erect posture is the firmest and most steady, because the surface of contact is the largest, and the weight falls perpendicularly to the fulcra.

3rd. That the muscles act more forcibly to raise the trunk erect, than to draw it in any other direction. In bending forwards, backwards, or to either side, the regulating muscles are nearer the centre of motion, consequently the lever is shorter, than when the centre of motion is on the part of the vertebræ opposite to that where the muscles are inserted, as must be the case in raising the trunk. This naturally follows, because, in all deflections of the spine from a perpendicular, the weight of the body inclines it in the direction we choose, whereas in erecting the body, this great weight must be more than counteracted by the muscles.

4th. In calculating the force employed by the muscles to move the spine, we should make allowance for the action of the cartilages placed between the vertebræ. These, in every deviation from an erect position, must necessarily be expanded on one side, and compressed on the other, notwithstanding their resistance to both. Whereas in raising the trunk they assist by their elasticity. We are hence led to the true reason of the increased height of the body in the morning compared with the night. The interposed vertebral cartilages, compressed through the day by the superincumbent burden, become more compact and thin in the evening. Relieved from pressure during the night, they are again expanded to their natural dimensions. Seeing that the bulk of any part must vary with the different degrees of distention, or repletion of the vessels composing it, we are at no loss to understand how we become taller after a plentiful meal, and are reduced by fasting and eva-

cuations. While an under-graduate at Edinburgh, the late Lord Cullen, then a junior barrister, acquired great celebrity by acting upon the above described principle. It was necessary, towards the success of his cause, that the client should be produced of a certain height. In order to secure the required stature, he remained in bed under pretence of sickness close to the court-house, until his personal appearance was required. He then entered the court, and being *immediately measured* was pronounced to be of the stipulated size. For this ingenious device, which gained the verdict, the youthful advocate was indebted to his learned parent, my esteemed preceptor.

5th. It will plainly appear from examining the different articulations of the bodies and oblique processes of the vertebræ, as well as the varying strength and contractile disposition of the connecting ligaments, that they are formed to permit more extensive motion forward than backwards. The latter is less useful, and might moreover prove dangerous by over-stretching the blood-vessels, lying near the bodies of the vertebræ.

From the preceding explanation of spinal mechanism, it is believed that all the unnatural curvatures, of which the spine is susceptible, will easily admit of explanation. So long as the constitution is vigorous, and the postures are *varied at short intervals*, the vertebral column preserves its correct and natural form uninjured. Of this we see daily proofs in the rural districts.

The hardy peasant and industrious milk maid follow their simple occupations from youth to age, without experiencing any of the bodily defects, which are so common among the pampered children of affluence. They live chiefly in secluded spots, and in the open air, where their constitutions are invigorated by labour, and it is moreover so frequently changed, that the spinal pillar never remains long enough in the same position, to contract any awkward bearing. Others of the lower class, whose mode of life is equally healthy, being doomed to remain for many hours together in stooping and constrained attitudes, are at length so accustomed to a particular habit, that it becomes inveterate and unchangeable. Of this I will bring forward a few instances which require only to be known to procure assent and conviction. It is an historical fact, that the Athenian sailors were all *round shouldered;* because, at that early period, ships were chiefly propelled with oars, which required great muscular exertion, and a particular position of the back :

> "Four galleys first, which equal rowers bear,
> Advancing in the watery lists appear."

The greater part of the Thames watermen are similarly misshapen and from the same cause. It is also well known, that the bargemen in the king's ships are chosen for their graceful and athletic figures. The principal business of these mariners is to convey officers from place to place, chiefly by rowing. Sailors, so employed, gradually lose their fine shape, and become hunched between the shoulders, or, in the jocular language of their com-

rades "bible backed." This deformity is not peculiar to seafaring persons, it prevails equally with all who habitually adopt the same posture. In France, the aged vine-dressers (les vieux vignerons) contract, from daily occupation, a permanent rotundity in their backs. With many it increases to a decided hump. In working among the vines, they are *constantly stooping* to prune the branches, and dig about the roots. This posture assumes at last a fixed and unalterable bow, because the spinal joints, having assumed a new action, afterwards accommodated themselves permanently to the change. I could furnish many similar examples from my own experience, and which were always traceable to palpable and obvious causes. Of these I will briefly refer to two. I was acquainted with a gentleman from early age to within a short period of his death. He served his clerkship to an eminent attorney, where he was constantly employed in copying law papers. At the commencement of his apprentice, he possessed a fine figure, and was in good health, but thin and remarkably tall. Being placed at a desk of the usual height, he was obliged while writing to stoop very much, and to continue leaning many hours every day. By submitting to this practice, he was observed to grow round shouldered, and afterwards to contract a large unsightly hump. The pressure it produced upon the spinal chord nearly paralized the lower extremities, and produced so many distressing symptoms, that he died exhausted and completely worn out, from this cause alone, at the early age of forty.*

A relation of mine, who managed her own domestic accounts, and also kept up an extensive correspondence, used to be employed several hours every day with her pen. She stooped very much while writing, but suffered little inconvenience from it, till she had completed her seventieth year. At that advanced period, she was seized with peripneumony, and again with a repetition of it in the ensuing winter. The severity of the attacks, and the powerfully debilitating remedies employed to subdue them, reduced her health and produced great debility. On returning to the desk, she was soon observed to stoop forward at all times, and at last to lean constantly with her chin almost touching the chest. Respiration was accelerated, and became very distressing on the smallest motion. Walking only a few paces, on an even surface, obliged her to stop suddenly in order to recover her breath. One day after dining alone about eight o'clock, and drinking tea, she retired early to rest, before her food had passed out of the stomach. Her maid assisted in taking off her clothes, and left her apparently ready to step into bed, in her usual health. While in the act of lying down she was, it is believed, suffocated, from the posture in which she was found, and died immediately. In addition to the ordinary difficulties affecting the lungs and heart, produced by the habitual contraction of the chest, these organs were further impeded and oppressed, by the distended stomach, forcing the diaphragm upwards

* The case of this gentleman, which was well known to my talented friend, Mr. Wing, is described by him in the Lancet, for October 22, 1836.

into the thorax. From these causes, the functions of two important organs were mechanically interrupted, and instant death followed.

I am of opinion, that in all the above cases, the deformity was produced in nearly the same manner. The bodies of the vertebræ were, by the posture adopted, forced nearer to one another in front, and further separated backward. The soft intervertebral substance readily yielding to the impressions stamped upon it, was condensed before, and expanded behind. This change in the bodies of the spinal column led necessarily to a corresponding alteration in the articulations of the transverse processes. They, like the bodies of the vertebræ, approached nearer in front, and receded as much behind.

I have now to notice more particularly some of the curvatures of the spine.

The species of spinal deformity, to which I have applied the term *semilunar*, or *simple lateral curvature*, is confined to a single bend of the vertebral pillar, either to the right or to the left. The curve may extend from the top to the bottom of the spine, or may be more limited. The bow may be very small, forming the segment of a large circle, or it may be much bolder and smaller. The varieties, which are numerous, can be traced in all to injuries, to bad habits, or unfavourable postures, long continued or frequently repeated. This is exemplified among the colliers of Warrington, who are obliged, from the thinness of the stratum of the coal, to sit, while working, in a bent posture. In this situation they describe the portion of a circle with the right side forced into the vein, in order to get at, and dig out, the coal. In process of time the spine is, in all of them, permanently turned towards the right, from being so many hours in a strained and distorted attitude. As these labourers sleep and take their meals above ground, the contortions, which are oftentimes very great, arise entirely from their particular mode of life.

Similar gibbosities are said to prevail among the colliers at Rotherham in Yorkshire, in the Somersetshire mines, and various other places. In these contortions the vertebræ are violently impelled, and forcibly separated towards the right. They are equally pressed together in the opposite direction. The inter-vertebral substance is moreover squeezed, and compressed on the left side, by the pressure of the vertebræ, and expanded on the right to fill up the vacancy between their contiguous bodies. In consequence, the articulating ligaments are stretched and extended in one direction, and contracted in the other.

Although the contortions of these hardy labourers tend to the right, from their mode of working in the mines, I have seen many examples, where the spine was turned equally as much to the left. Persons who devote many hours to the *harp*, are injured in figure, from adopting unfavourable attitudes during the performance. The body inclines to the left, and, in process of time, contracts a fixed bow in the same direction. Of this distortion I have met with many examples among the ladies, which I could clearly trace to this origin. Nor ought it to create surprise, that delicate females should suffer from a bent carriage, when the backs of hardy and athletic males are so apt to give way to the same cause. The curvature

differs very much in these cases. It may occupy the whole length of the back bone, or be confined to a few vertebræ. The bow is also great or small, according to circumstances.

This deformity is not always produced by bad habits. It is occasioned by falls, twists, and other accidents, of which I have seen many examples. A few days since* I was consulted for a little girl of only two years old, who had a curvature to the right, from the nape of her neck to the sacrum. She was at birth remarked for the symmetry of her figure. About twelve months since she fell down suddenly, and complained much at the time. The pain soon went off, and the circumstance was forgotten, till she was observed to be rather lame in walking. This created alarm, and the mother discovered what appeared to be a slight deviation in the spine, with a small protuberance of one of the vertebræ between the shoulders. On examination, I detected the lateral deviation, and also an obvious projection of the sixth dorsal vertebra, with slight elevation of two or three of the vertebræ on each side of it.

The species, commonly designated *lateral curvature*, really comprehends a *double bend* of the vertebral column. In it, the spine is turned *one* way between the *shoulders*, and *another* in the *loins*. This deformity is so frequent, that hardly a female in the superior ranks of life, or devoted to sedentary employments, is wholly free. This lamentable truth ought to be generally known, and as loudly proclaimed, because the consequences to health, to usefulness, and personal appearance, are so very distressing, that the prevention and the cure should be made objects of primary solicitude, wherever these maladies prevail. I have often been importuned to explain the causes of their increased and increasing frequency among us. The question is truly important, and deserves an explicit answer. It is however of so extensive a description, and moreover involves so many particulars, that in order to give a clear and satisfactory answer, the whole system of female education must come under consideration, and its manifold errors fully exposed. It is bad throughout, and rotten to the very core. Nothing is sound. All must be changed, before constitutional deflections of the spine will either be wholly subdued or much reduced in number. For example, can any reflecting person really approve of keeping young, and delicate girls, day after day, for hours together, stooping forward, or sideways, on the music stool, or in writing exercises? Yet in this unnatural position they are obliged to remain in heated and often crowded apartments, to learn tedious lessons, or perform some equally uninviting task. To accomplish these objects, severe and active mental exertions must be endured, which, while they fatigue and exhaust the mind by over excitement, reduce it to a state of chronic debility and languor, seldom subdued in after life. Many precocious youths, who delight their parents with brilliant sallies of wit, and early acquirements, become dull and stupid in mature age. This degeneracy of intellect, which surprises and disappoints the inconsiderate, is easily explained. Mental powers too early exerted, or over-

* December 15, 1836.

strained, seldom wholly recover their natural vigour in after life. Every thing is changed for the worse. They become dull, slow, and stupid, to the great mortification of their sanguine and anxious parents.

So long as children are obliged to conform to the present system, little good will be done to their physical constitutions. Flattered with the early and promising capacities of their tender offspring, parents force the mental faculties beyond their strength. In order to make them prodigies in learning, and in elegant accomplishments, they shut them up from morn till night in close rooms, where both the mental and bodily health are gradually undermined, and at length irreparably destroyed. A strong example illustrative of this principle occurred under my own eyes. A widower, left with three small daughters, was at great pains to have them highly accomplished. For this purpose two governesses were in constant attendance from early dawn to the hour of rest. They were incessantly employed in hearing lessons, or imparting knowledge. Even during the time given to recreation in walking, and carriage exercises, these ladies were in attendance to interrogate their pupils, and illustrate the subjects with which they had been occupied. Besides this regular and uninterrupted course of study, particular masters were engaged to discipline the little girls in French, Italian, geography, music, &c.

All went on well for a short period. The children learned their lessons, and performed their tasks to the satisfaction of their delighted father. As might have been anticipated, they soon became dissatisfied with incessant toil, took an aversion to books, and to their parent, the author of their troubles. Notwithstanding these palpable demonstrations, and repeated admonitions, he obstinately persevered, in opposition to my earnest expostulations and remonstrances. The children became more and more discontented and unruly. It was afterwards discovered, as I had predicted, that the mental faculties, which had at first shown early indications of maturity, did not expand with their former rapidity. The lessons and tasks required longer preparation. They were delivered with monotony and languor. The pleasure of study was no longer visible in their deportment and conversation. Before arriving at the adult age, they were dull in conversation, unwilling to read the most amusing books, and slow in the acquisition of knowledge. So far from discovering superior talents and acquirements, they were now found to be inferior to many, whose faculties had not been strained and perplexed by over discipline. The mind, like the body, *is strengthened and invigorated with moderate employment, but enfeebled and exhausted by over fatigue.**

* The reader may object, that these occupations do not of themselves produce spinal complaints, but it is eqully true that they are their most common harbingers. The explanation is easy; girls, during their tedious and protracted studies, are apt to sink into lounging and ungraceful postures, which, although easily rectified at first, soon degenerate into fixed habits, and end in permanent distortions. Of this result, I have myself witnessed so many deplorable examples, that I am fully convinced, that most lateral curvatures are in this way produced.

It may not be out of place, while on the subject of education, to add, that I was formerly acquainted with an elderly clergyman, the son of an accomplished clerical schoolmaster, who had been so persecuted with Greek and Latin, that, after leaving school, he could not be prevailed upon to look into a classical author. He was able, at the age of seventy, to repeat from memory select passages out of Homer, Virgil, and Horace, but had no pleasure in reciting them. His brother was likewise a learned clergyman. Neither of these gentlemen, when relieved from paternal controul, prosecuted their studies, or felt any taste for literature. They were not distinguished in after life either for mental endowments, or any other enviable acquirement. So true is the old adage, "All work and no play, makes Jack a dull boy."

EDWARD HARRISON.

DEPUTATION FROM THE DISSENTERS.

A DEPUTATION of delegates—important on account of its numbers and the greater numbers of serious men whom they represented, and of the wide and varied surface of the empire from whence they were delegated—waited upon Lord Melbourne yesterday, to state what they required on this important subject. Lord John Russell COULD NOT BE FOUND, he being the person whose business it was to receive them. We shall be agreeably disappointed if the Whigs introduce a good measure, and if they do, from the manner in which they have spoken away from anything definite, we shall believe it is because of the attitude the Dissenters have assumed, and not from any desire to diminish the grip which the favoured sect have upon the purses of the other sects. Indeed they have—that is the aristocracy—greater reason to support the church than even the clergy themselves: the clergy have the life estate, but the fee-simple is with the aristocracy—they have the advowsons.

It is pleasing, amidst the disappointments which the love and tenacity of power oppose to just concessions, to see and feel, that the temporary organizations of the people thereby induced, teaches them how to bring their strength and just influence to bear upon those who are their servants, but have been, practically, their masters; that the final result of a check to-day is an accumulation of strength and a more extended victory to-morrow. If the Dissenters are now firm, and the Committee of Delegates do not put any discretion into the hands of trading politicians and secretaries, of any denomination, who have affected to represent their interests, they will gain their object. They must remember, and act upon the conviction, that public safety consists not in confidence, but in watching. The error of the people has been in sluggishness, not in political activity: the agitation to which they have been obliged to resort to accomplish political emancipation proves the tenacity of power, not improper restlessness in the people; and that those masters are best served who overseer and superintend their own establishments. Much is gained when the habit of uniting and acting together is learned.

Feb. 3, 1837. E. SEARCH.

MONUMENT TO THE SCOTCH MARTYRS.—THE WELLINGTON STATUE.

A long list of subscriptions to what is termed the Wellington Statue appears in the papers of the day. It is pleasing to see, at the same time, the advertisement of a meeting to consider of the erection of a Monument to the Scotch Reformers and Martyrs of 1793—4. This last is a step in the right direction,—it is to render homage to a principle of peace, instead of sanctifying false glory; these men suffered for truth; they sought to improve the many,—the warrior seeks to destroy them; they interested themselves to support those principles, which bore onward the rights of the millions and the improvement of the unborn masses,—the warrior's glory consists in their destruction. Nature's nobility are those, who have discovered, reverenced, and spread the principles of justice, benevolence, science, and peace; improved the arts of production, and taught the necessity of equalizing distribution. And this class has sprung especially from amongst the people. Such men as Caxton, Milton, Watt, Arkwright, Franklin, Washington, Adam Smith, Fulton.

Those called great amongst the aristocracy have been great in the power of organizing masses for war. The victories of the people have been, and are, those of mind over matter;—of commerce and interchange over war and non-intercourse;—of production over destruction;—of the steam engine and its applications over rockets and gunpowder, the adopted of governments. The arts of peace have been, and are, cultivated by the people; the art of destruction has been, and is, cultivated by the aristocracy. The latter enjoy all the places of profit in the army, the navy, and the colonies; in short, all the profits of war, and of the organization, in which destructive masses are held together during peace, for the purposes of war. The share of the people, imposed by inequitable law-makers, has been, to pay the millions raised for these purposes; and the share of those of the poor, whose misery and ignorance compel them to accept the starvation hire allotted to the targets with worsted epaulets, is the triangle and 10d. a-day. The aristocracy make the laws and have had the organization of things as they are. Could the people have done worse for themselves?

It is pleasing to see in these instances peculiar evidences of the progress of the pen and intellect over the sword and brutality;—the friends of the Scotch Martyrs put forth their advertisements, stating, enlarging upon, enforcing, and illustrating the principles for which their friends were persecuted, eventually unto death; whilst those, who would get subscriptions for a statue to the hero of a hundred slaughters, yet living and influential, are obliged to put his onslaughts against humanity out of view; and to petition for subscriptions because he assisted to build a bridge.

A social convenience is preferred to social destruction, and this slight contribution to a peaceful object is preferred to the false glory steamed from human gore.

E. SEARCH.

THE CHRISTIAN PHYSICIAN,
AND
ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

No. 8.] APRIL 1, 1837. [Vol. II.

PHRENOLOGY AND CRIMINAL LEGISLATION, AND CRIMINAL DISCIPLINE.

An Essay read before the Anthropological Society, by John Epps, M.D., *January* 26, 1837.

Continued from page 196.

Plans, realizing such beneficial results, have been adopted at Auburn, a prison in the United States of America. So effectual has been the silence enforced at this establishment among the prisoners, that individuals have worked beside other individuals (convicts) for years, without becoming acquainted even with the names of those working beside them. So important is this experimental demonstration of the accuracy of the views already propounded, that we think the following extract, from Mr. Stuart's travels, will not be deemed unworthy of the attention of the Society:

"September 2, 1828.

"We have spent the morning in visiting and inspecting the state prison here, Auburn. Although not many years erected, it is already celebrated as establishing, that, by the suitable construction of buildings, and the enforcing a system of strict regulations, solitude and labour can be so united, that the evils attending idle solitary confinement may be avoided; and that criminals may be made, not only to support themselves well, so that their health may not suffer, while enduring the sentence of the law, but to defray all the necessary expences of agent, keepers, and guard, physician and chaplain; and, at the same time, be constantly employed, and subjected to a rigid course of moral and reformatory discipline.

"We found no difficulty in getting admission, a fee of 25 cents is paid by each person, and accounted for as part of the funds of the prison. One of the assistant-keepers was directed to conduct us through the prison, and to give us such information as we required.

"A space of ground, 500 feet square, is enclosed by a very lofty external wall, 35 feet high within. The great building of the prison, about 100 feet from these walls, is three-sided: the front 276 feet long, and 45 feet deep; and the sides 242 by 45. It contains the keeper's house and necessary offices, the eating hall, hospital, chapel, kitchens, and wash-rooms, and the cells, which are 7 feet long, 3½ wide, and 7 feet high: the windows in each 4 feet by 6, are glazed, and secured by a strong iron grating. The only opening from the cell, except the ventilator, is the door, in the upper end of which is an iron grate, 18 by 20 inches. Through this grate, all

the light, heat, and air, are admitted to the cells. The ventilator, which is about 3 inches in diameter, extends from the back of the cell to the roof of the building. The door of the cell, of which the grate is a part, closes on the inner edge of the wall, 2 feet deep. This recess in front of each door increases the difficulty of conversation and communication between the prisoners, prevents them from seeing into the galleries, and furnishes a convenient place for an officer of the prison to converse without being seen or heard by those in the adjoining cells. The area round the cells, which is 10 feet wide, is open from the ground to the roof, in front of 5 stories of cells. Of this area, 3 feet adjoining the cells are occupied by the galleries.

"The advantages of this description of buildings are its security and economy.

"The security is obvious. The prisoner must first escape from the cell, then avoid the sentinel in the open area, then force the external wall, and after all, he is only in the yard, the wall of which is 30 feet high. No escape has hitherto taken place from this prison.

"The economy is great in respect to the space occupied, and in heating, lighting, and guarding. Twelve small stoves, and twelve small lamps, placed in the open area in front of the cells, afford heat and light for 555 cells, and one sentinel is found sufficient to guard the prisoners. The space in front of the cells is a perfect sounding gallery, so that the sentinel in the open area on the ground can hear a whisper from a distant cell in the upper story.

"The shops, or working rooms, are almost all attached to the outer wall of the prison, that wall being the outer wall of the shops; they are, when completed, to be about 1600 feet long, 26 feet wide, and 7 feet high on the side next to the yard, and 16 on the external wall. The side of the shops on the yard is lighted by a row of windows 4 feet by 3 feet 4 inches, and 2 feet 7 inches asunder. There is also a row of windows in the roof of the shops, consisting of an unbroken line of 7 feet by 9. In the rear of the shops is an avenue or passage, sufficiently lighted by numerous small openings cut in the partitions, which enables the keepers to inspect the convicts without their knowledge, and visitors to pass through without going into the shops."

Phrenology, as has been already stated, teaches that all the faculties were given to man for activity: and, therefore, it is quite evident, that man cannot rest in a state of inaction: and as Criminal Discipline has for its proper object, the causing to cease the activities of the animal feelings by removing all excitements to the same, it would be impossible to realize any benefit, unless at the same time objects were presented to call the highest faculties into activity, thus giving something on which the mind can outgo.

The mind must have something to love. It is not enough to take away the excitements to vice: we must present the excitements to virtue.

As an important illustration of the truth of this view, we inva-

riably find, that, when man is commanded not to set his affections on things *below*, he is always at the same time expected to set his affections on things *above:* thus establishing with the authority of the scriptures, the necessity that man should have something on which to set his affections. The Author of the scriptures thus authorizing the phrenological truth, that it is not enough to put the animal feelings into a state of inaction, but that, at the same time, the moral feelings must be brought into a state of action.

It has been argued that the *animal* man will not take *moral* food. He will not as long as any animal food is given; but Phrenology, by teaching that every faculty seeks for activity, demonstrates, that, by carefully withholding objects appealing to the animal feelings, such a state of want will be produced, that he will be glad to obtain the relief which the activity of the higher feelings, induced by the reception of the food presented to them, will produce.

As the best evidence on this point, the following statements of Mr. Smith, Chaplain of the Auburn prison, to the Managers of the Boston Prison Discipline Society, are worthy of record.

" I have now spent two years among the convicts in this prison, I review the period with deep emotion. I think it has been the most useful, certainly the happiest part of my life. They who have asked me, how could you immure yourself in so dreary a place, and among such a class of men? have yet to learn, what is the richest luxury that a benevolent heart can enjoy. If left to my choice, no earthly consideration would tempt me to leave this for any other field of labour on earth.

" The ordinary religious services have been regularly performed. To the preaching on the sabbath the convicts have uniformly listened with fixed attention, and often with deep and overwhelming emotion. The services are always characterized by perfect order and apparent solemnity. It has been the common remark of casual visitors, as well as others, that they never witnessed an equal degree of attention, and apparent seriousness and interest in any other congregation.

" From the chapel I have followed them in the afternoon to their solitary cells; and, there, in the best possible circumstances for producing effect, have pressed home upon their consciences individually, the truths which they have heard in the public assembly, in such manner as I conceive to be best adapted to their different capacities and states of feeling. In these visits I have often witnessed the power of truth, in making the stoutest heart, that could be approached in no other circumstances, tremble. Nothing is more common than to hear them express their surprise, that they never thought of these things before, and their gratitude that they have been arrested, and brought into a place, where they are taught them. In these labours I have been assisted by the use of tracts, which the keeper has kindly given me permission to put into their hands on the sabbath, and which, by a suitable selection and adaptation to particular cases, have not unfrequently proved to be efficient co-workers in producing and strengthening salutary impressions upon their minds.

"The sabbath school still holds a prominent place in our system of instruction, and claims our highest regard. Its numbers have been gradually increased, till now it contains 160 pupils in 31 classes, which are under the care of 32 theological students as teachers, one of whom takes the immediate oversight of the whole. I scarcely know which most to admire, the devotedness of the teachers, or the ardour and the industry of the scholars. The liveliest interest is manifested by both. A mutual and strong attachment springs up between them. The teachers seem willing to forego any other privilege for the sake of meeting and instructing their pupils; and among the scholars, generally, no other punishment is more dreaded than exclusion from the school. It has been interesting to me to observe, upon the discharge of these scholars from prison, how often the first inquiry has been, where they might find their teachers?

"In all my intercourse with the convicts, I have met with nothing but respectful and affectionate treatment. No one, in his right mind, has ever manifested towards me the least disrespect or unkindness."

It is true that the moral digestive powers of criminals may be weak morally, as babes are physically. The expectation of realizing *at once*, by presenting moral food, immediate conversion, a horror of their acts, a deep-rooted sense of the injustice of their proceedings, is absurd. The moral perception will increase each day; and thus the senses of right and wrong, of kindness and unkindness, will correspondently develop themselves, and thus the reformation of the offender will be effected.

In order to render this moral feeding effectual, it must be continued a long time; a time to be limited only by the *improvement of the organization;* to be continued until, at least, to act morally has become a *habit.* Phrenology enables us to prove that such improvement in the organization does actually take place, and that therefore the worst of mankind are capable of improvement. And the necessity of this continuance under the exclusive application of moral aliments becomes more apparent, when it is remembered, that it is from the great preponderance of the animal organization over the moral, that, in part, brought the confined into the condition of criminals. And moreover, it may be added, that the degree of preponderance, indicated by the organization, may serve to a certain extent as an index of the time during which the patient should be subject to moral, exclusive moral feeding.

The power of habit in gratifying his animal propensities is strong: we seek to make the power of habit in exercising the moral sentiments still stronger, and thus placing the moral habit against the animal habit to gain the victory.

Phrenology thus demonstrates the possibility of reforming the criminal: and the doctrines, as laid down by Phrenology, are demonstrated phrenologically to be true, even though no experimental evidence could be brought to prove them.

On this point, however, of the duration of the application of the moral means so as to induce a moral habit, we possess fortunately

evidence of the strongest character. Of 206 criminals, dismissed from the prison at Auburn, 146 were reformed: of 427, committed to prison in 1827, only 19 were re-committals: in 1829, out of 570 committed, only 17 were re-commitments.

Another evidence has been afforded nearer home. This is to be found in the following tabular statement by Mr. Brebner, of the number of re-commitments to the Glasgow Bridewell; (in which institution the criminals work in separate cells, and have moral instruction.)

Of prisoners sentenced for the first time to

14 days	confinement	there returned for new crimes about	75 per cent.
30 ditto	ditto	. . . . .	60 ditto
40 ditto	ditto	. . . . .	50 ditto
60 ditto	ditto	. . . . .	40 ditto
3 months	ditto	. . . . .	25 ditto
6 ditto	ditto	. . . . .	10 ditto
9 ditto	ditto	. . . . .	7½ ditto
12 ditto	ditto	. . . . .	4 ditto
18 ditto	ditto	. . . . .	1 ditto
24 ditto	ditto	. . . . .	none

During a period of ten years, 93 persons were committed for two years, of whom not one returned.

These interesting facts justify the preceding statements, and afford a pleasing demonstration of the principle deducible from Phrenology. At the same time Phrenology will enable the judicial authority to regulate, beneficially, the *time* of punishment, or rather the time for the *reformation* of the criminal.

It is quite evident that some individuals commit crime, who possess a very favourable organization; the proportion of the organs of the moral feelings being considerable. Now, these individuals cannot require the same amount of time to effect that improvement in the organization, essential to be realized before the individual is allowed to enter with freedom upon the social duties of life; as is required by an individual with a less favourable organization.

It is also equally evident that the individual, liberated from prison, should have means supplied to him from some source or other, which will prevent him being subject to the temptations of poverty immediately he is sent forth. And here again, the advantages resulting when a prison becomes the representative of a place for reformation, are again apparent, for little objection would exist in the minds of individuals to receive the reformed criminals: the conviction being that they are reformed.

Under the mode of treatment thus adopted at the American prisons, sanctioned as it is by Phrenology, we may infer that the objection, that such a mode of treatment strips a prison of its terrors, and thereby removes a powerful motive, preventing the commission of crime, will be negatived by the most positive and well-founded statements.

The following is the part of a Report to the Legislature, from the inspectors of the New Penitentiary at Philadelphia.

"Great terror," say the inspectors, "is known to have been impressed upon the minds of the convict community by this institution, and the small number of prisoners sent from the eastern district, including a vast majority of the population of the state, together with the careful manner in which, it has been ascertained, the most knowing rogues avoid committing those offences which would subject them to its discipline, may be regarded as powerful reasons for extending its operations to those penitentiary offences at present not within the statute."*

Again—"Many years' experience," say the inspectors of the New Penitentiary in Philadelphia, "in the practical operation of the penal laws and prison discipline, on the part of most of the inspectors, and the particular knowledge of the board in the actual operation of this institution, upon the moral and physical powers of the prisoners, and upon the public interests, have established a conviction of the humanity and excellence of this system of penitentiary punishment; and that its permanent establishment and extension to all crimes and misdemeanours punishable by imprisonment at hard labour, under the existing laws, as soon as an adequate number of cells can be provided, will be consistent with the purest principles of philanthropy, and calculated to advance the interests, and sustain the elevated character of the commonwealth of Philadelphia."†—January 7, 1832.

The governor of the state of Charleston thus speaks, in his message to the state, of the state prison, and of its influence, as a motive to virtuous action, or at least, to the avoidance of vicious actions. "Separation at night, silence, order, industry, respectful and cheerful obedience among the convicts, harmony, mildness, and authority among the officers, are its leading features. But is there no danger, in making a state prison a school of reform, that you will make it a lure to vice, a place which villains will covet, and commit sin that they may inhabit? Not at all. There have not been so few persons committed to the state prison at the spring term of the different courts in the commonwealth, and at the monthly sittings of the municipal court in Boston, for many years, as within the last three months. The number of persons committed to this prison annually, too, is diminishing rather than increasing. *The prison was probably never before so great a terror to evil doers as it is now. Good men look upon it with complacency; bad men with abhorrence till they become good.*"

Such then are the results of a system of criminal discipline, founded upon principles in accordance with the truths of Phrenology. And it is very pleasing that we are able to add, that the benefit of such a system has been established by the important fact, that it can be carried through without any expence to the state.

In the report of the inspectors of the prison at Auburn, laid before the legislature of the state of New York, in January 1832, the

---

* Sixth Report of the Boston Prison Discipline Society. p. 28.
† Ibid. p. 70.

following is the statement of the expenditure and income of the institution from the 1st November 1830, to the 30th September 1831.

	Dollars.	Cts.
"Earnings of the convicts as charged to the contractors	36,209	44
"Expenditure for the general support and repairs of the prison (including the amount paid to discharged convicts)	34,405	61
"Leaving a balance in favour of the prison of .	1,803	83

"Another instance of successful management is found in the prison at Wethersfield, in the state of Connecticut. This institution when it had been in operation as a penitentiary for about four years only, had during that period gained a clear profit to the state, by the labour of the prisoners, of 17,139d. 53c. This balance remains after deducting not only the expences of food, clothing, fuel, medical attendance, and incidental expences, but likewise the salaries of the officers. During a similar period of time, the same prison, under the old system of management, cost the state, over and above the labour of the criminals, the sum of 4,338d. 78c., making a difference between the old and the new prison, in $3\frac{1}{2}$ years, of 41,478d. 31c. in the keeping of an average of about 150 convicts.*"

At the state prison at Frankfort, in Kentucky, the keeper contracts with the state to support the prison, on condition of receiving the proceeds of the convicts' labour, binding himself, at the same time, to pay over to the state one-half of the excess of the income above the expenditure. In five years that excess has amounted to several thousand dollars."

Why should not similar results be obtained in this country? It is maintained that the circumstances of this country, in reference to the *value* of *labour*, is not the same as in America. One fact is at hand, however, to demonstrate that even here the system may be made to pay: it is in reference to the Preston House of Correction.†

Having thus developed that the criminal is an individual who subverts the order in which the Creator has arranged the faculties of the human mind: having shown that this violation is attended with injury: that the perception of the injury by the parties injured will be in accordance with this organization: having shown that the means, proposed by the injured to prevent a repetition of the injury, will be in accordance with that organization: having demonstrated, that under the *baronial* period, the *superstitious* period, and the *commercial* period of Britain's history, these means have

* Sixth Report of the Boston Prison Discipline Society, p. 46.

† During the year ending 2nd May, 1821, the total amount of the earnings of the prisoners in this gaol was 2,149*l.* 13*s.* 5*d.*, while during the same period the cost of their food was 1,988*l* 8*s.* $5\frac{1}{2}$*d.* The average number of prisoners was 349. The work carried on was chiefly weaving, by which each prisoner earned on an average 5*s.* per week. Of 150 looms employed, a considerable portion were *of the prisoners' own manufacture*, made from timber purchased wholesale. This excellent system met, we believe, with little encouragement. An account of the Preston House of Correction may be found in the 1st volume of *The Inquirer*, a publication now defunct.

been produced by the active and largely developed animal feelings, stimulating the intellectual powers to conceive modes of torture: having shown that these sanguinary punishments do not have the effect of preventing crime; and, indeed, as Lord Bacon remarks, that this "revenge is a kind of wild justice, which the more man's nature runs to, the more ought law to weed it out: "having shown that a great change has taken place in the last few years in the public mind, in reference to punishment: and having connected this change with organization: having developed the plans, which Phrenology demonstrates ought to be adopted, so as to reform the offender: having shown that such plans have been effectually tried in the United States, I beg, Sir, to conclude this Essay, expressing my thanks for the patient attention of the Society; and also declaring my hope, that we shall be enabled to promote the extension of the principles of Phrenology in this most important direction.

SEPTENNIAL ACT. HOUSE OF COMMONS ABDICATING ITS POWER.

We observe, amongst other resolutions advertised in the papers against the Poor Laws, a very sensible protest against the unconstitutional and dangerous conduct of the House of Commons, in delegating their power of making laws to the Poor Law Commissioners. This is one of the evils of having a mob for law makers; for an assembly of between 600 and 700 is a mob, and no regulations can render them a fitting assembly to deliberate with that grave continuousness and steady care for principles and details, which, in law making, are essential.

Every one of the men who voted for the Septennial Bill, deserved transportation. Elected to serve their constituents for three years, they dishonestly, and looking to the gravity of the trust confided to them, it is not too much to say, wickedly voted, that they would sit for seven years; and that future parliaments should do the same.

If the servant, who is intrusted with his master's money, is worthy of transportation for embezzling it; how much more do those representatives, who are instrusted with the liberties of a nation, deserve this, for seizing those liberties into their own hands, and handing their constituents over in bonds to others. The resolutions to which we refer very properly declared, that the House of Commons had no such power of delegation in them, and that, if they found themselves incompetent to make laws, they ought to have referred to their constituents, or called a convention of the people. We observe, with regret, that it is proposed to be guilty of the same violation of duty, with reference to the intended Poor Law evasion for Ireland; for the measure at present indicated as that which is intended can hardly be called a Poor Law.—Why should there be but one long sitting of Parliament in the year? Why should not its sittings be shorter and more frequent?

E. SEARCH.

ON THE CAUSES AND THE SEAT OF CONSTITUTIONAL SPINAL DISTORTIONS.

To the Editor of the Anthropological Magazine.

Holles Street, March 7th, 1837.

Dear Sir,

I have in former letters endeavoured, and I trust successfully, to place the seat of *constitutional* deformities of the spinal pillar in a tissue, which, in connexion with these deformities, had not been thought of, before I pointed it out. When I first arrived at the conclusion, that the seat of constitutional spinal distortions is in the articulating ligaments of the vertebral pillar, I became so convinced of its truth, that it really astonished me, that in the revolution of many centuries, no one had taken the same view, and treated spinal complaints agreeable to it. The idea, immediately on its occurrence, took full possession of my mind and produced immediate conviction. The grounds of belief appeared to me irresistible; being consistent with one another, and moreover so agreeable to anatomy and pathology. Before stating my peculiar opinions, I wish to explain those of others, and to offer the reasons for my dissent. In this way I shall be able, while combating the doctrines of preceding writers, to reflect light upon my own, and thus give to them additional support.

It would be foreign to my present purpose to notice all the supposed causes of spinal complaints, or even to investigate any at great length; being very numerous, and assailing indiscriminately every class of society. No class is exempt; but the causes prevail most in the higher orders,—among the rich, the luxurious, and the indolent. These are the chief victims, and, according to the routine methods of our most eminent and busiest practitioners, *are never cured, though the deformity may be arrested in its course.* I say this from much personal experience. I desire to add, that when our proposed infirmary, already in progress, comes into activity, these very obstinate diseases, which are properly and emphatically denominated "opprobria medicorum," will, in their early stages, be easily and speedily removed, so as to leave no trace, not even the smallest, of their former existence. I venture to affirm, that there exist no diseases, both which are more *certainly curable than are spinal deformities, under whatever shapes they appear, or which, when neglected, lead to more distressing consequences, through the remainder of life.* All these things I am prepared to demonstrate, and establish in a course of Lectures, which I intend to deliver in the ensuing summer, if I obtain encouragement enough to proceed with them.

OF THE SPECIES.

Constitutional spinal deformities are of several species, although their essential characters are similar. There is a great difference

in the appearance of the distortions, and in the treatment, as you will readily admit from looking at the casts, taken from life, now in my possession.

1st. Species. Sometimes the spine between the shoulders projects backwards, and forms the *hump-back*. This is the disease described by Mr. Pott. You will see a specimen of it in the case of Mr. George Andrews, in my Pathological and Practical Observations on Spinal Complaints.* He was my patient many years since, and is now an underwriter at Lloyd's, where he may be seen every day, enjoying good health and a good form. The second, Master Wood, of Barbican, whose case is fully described in my letter to Sir B. Brodie, (page 21st,) and is illustrated with engravings. He became my patient more than eight years since, at the tender age of five. His figure is remarkably good, and his health too. This modification of deformity prevails most among males, though it is not wholly confined to them. Its true nature has been commonly mistaken, and, in consequence, an erroneous practice has been followed. I allude to caustic issues, moxas, setons, and the other torturing modes, which constituted the only resources of our art, at the time I removed from Lincolnshire to London. This practice, originally introduced at Bartholomew's Hospital by the late Mr. Pott, was universally adopted in England, and generally over the civilized world for more than half a century. He, and his numerous imitators, proceeded upon a mistaken view of the complaint.

According to them the vertebræ were in a state of ulceration, and, therefore, irritants must be employed for their cure. These were supposed to be useful by producing a bony union among the diseased vertebræ. Although this doctrine was so universally received and acted upon, a dispassionate examination of distorted spines will show, that the vertebræ are seldom structurally affected on these occasions, *especially at first*. They are merely displaced, and removed out of their proper situations in the spinal column. I do not, however, wish to deny, that they are sometimes ulcerated; or, as it is said, carious; but this more frequently takes place after, and in consequence of, displacement, than before its occurrence. Suffice it to say, that as these violent applications have no power *to lessen the deformity, however long they may be continued, patients never derive any real advantage from them*, though the constitution is often injured by their severity. When this projection invades the loins, the graceful hollow is not merely obliterated, but the spine is frequently protuberant. I will give an example. It occurred to a boy of nine.† He had one limb several inches longer than the other. *This difference of length is a common occurrence in spinal complaints of every description*, because the vertebræ, in receding from their beds, take a slanting direction, by which the disposition of the pelvis is changed, one side of it is raised, and the other equally depressed. It is surprising how

---

* See case 4th, page 210.

† See my Letter to Sir B. Brodie, p. 14.

much the true nature of these afflictions has been mistaken, and what errors in practice have arisen. Instead of tracing them to their true source in the spinal column, they are too often supposed to originate in rickets, or a scrofulous inflammation of the hip joint. I have had occasion to witness many of these mistakes made by persons of the first professional reputation, and I have myself been guilty of similar errors before I entertained my present views of spinal complaints. This form is by no means uncommon, because the vertebræ are not protected by the ribs, and are, moreover, placed at a greater distance from each other by soft yielding cartilage. Persons so affected have an infirm, tottering gait, and are soon fatigued by exercise. They cannot sit or stand long erect. Their easiest posture is leaning forward. This variety is almost always productive of palsy, or, as we technically call it, a paraplegia of one or both of the lower extremities. This boy had paralysis in one leg when he became my patient. One limb was *two inches longer than the other*. He continues well, and in the full enjoyment of his bodily faculties. He was formerly articled to a solicitor, and is now in practice for himself. The case of this young gentleman, and a plate of the deformity, are also given in my letter to Sir B. Brodie.

My excellent friend, the late Dr. Sims, had the shaking palsy for several of his last years. In the fulfilment of his obstetrical duties, he often knelt down, leaning forward for a long time together, to make greater personal exertions. This unnatural posture, and the accompanying efforts, at length drove the lumbar spine out of its proper direction; he had, in consequence, a large prominence in the part, and constantly leaned forward in walking, standing, and sitting. These impediments prevented his being much on foot, and, I believe, induced him to retire from practice somewhat sooner than he would otherwise have done. The public therefore were, in consequence of this lumbar prominence, deprived of the professional services of one of the best of men, and ablest obstetrical practitioners of his day.

I know another talented physician, a fellow of the college of physicians, similarly afflicted; who, having taken an erroneous view of his complaint, never consulted me for it, or derived any benefit from medical treatment. His inability to prosecute his medical duties is the more to be lamented, because he had distinguished himself as a pathological writer, and promised to be an ornament to his profession.

The spinal column also frequently gives way in the lower dorsal and upper lumbar spine. When these vertebræ protuberate, the whole column becomes loose and infirm. The symptoms, arising from this modification, are almost innumerable, and are, moreover, most afflicting to bear. A lady, nearly fifty years of age, applied for my assistance only a few years since. She had already suffered more than sixteen years without intermission, and to such a degree that, unable to bear her afflictions with resignation, she prayed for death every day. Being in affluent circumstances, and married to a most affectionate husband, she was always in search of health, not

among quacks or pretenders, she had too good an understanding to place confidence in them. During this long period, she consulted the most eminent physicians and surgeons in the metropolis and the provinces. In her last adventure, at Cheltenham, she had the good fortune to be seated near a retired medical friend of mine. After observing her some time, he said, I think you are labouring under a spinal complaint. He examined her back the following morning, and pronounced it to be spinal. Her attending physician, an eminent practitioner, who had frequently been consulted, was now sent for, and desired to judge for himself. On looking at her back *for the first time*, he could not deny the evidence of his senses, and coincided in opinion with my talented friend. Thus, after a protracted suffering of sixteen years, and submitting to the professional treatment of more than thirty eminent practitioners, her spinal column was examined for *the first time*, and the true nature of her complaint accidentally discovered, by *a casual visitor*, *who met her among a party at cards*. How many unhappy years might have been saved to this amiable couple, had any of her numerous advisers been acquainted with the maladies of the spine, as there can be no doubt, that her complaint was from the first spinal.

If we take into account the thousands of human beings, similarly affected at this very time, in different regions of the habitable globe, whose complaints are equally mistaken, and therefore continue unrelieved, what reflections will they produce. Nor is it too much to say, that, under an improved curative system, tens and hundreds of thousands will be annually rescued from interminable misery, and premature death. The lady referred to started for town the same day, and I had the gratification to restore her to good health, to an elegant figure, and the full enjoyment of her station in life. When we consider that this amiable and accomplished lady, has lost sixteen of the best years of her life, through the ignorance of the faculty, and nothing else, we have too much reason to lament, that spinal diseases are so little understood; and that, in consequence of ignorance alone, so many human beings are now suffering unnecessary pain and anguish. To the benevolent exertions of humane individuals I look for the removal of these afflictions, which fill the cup with gall and wormwood, whatever may be its other contents. I desire, before I take leave of this division of spinal diseases, briefly to relate the leading particulars of another case. Miss B——, the niece of the late Dr. Pemberton, became my patient in the year 1821, and having received a cure, walked from her lodgings in Hanover Street to wait upon the doctor, at his residence in George Street, Hanover Square. Before the treatment she could neither stand erect for a single minute, nor walk ten yards, without resting by the way. Instead of the lumbar hollow, her spine projected outward considerably, making an unsightly tumor. After the cure her figure became remarkably fine. All her movements were likewise easy and graceful. The loins, in particular, had recovered their beautiful shape. Thus she appeared at her first visit before the doctor and her aunt. They were both loud in their commendations, and congratulated her again and

again upon the improvement of her health, which was very evident. She observed to them in reply, that her loins had been reduced in circumference *seven inches*. She knew it, she said, from the stays, which had been taken in seven inches, and were no tighter since than before the cure. Upon hearing the remark, her prejudiced uncle exclaimed, "You talk nonsense: when Dr. Harrison has placed St. Paul's Cathedral before my eyes in this room, I will believe that he has made a new arrangement in your back, and not sooner."

EDWARD HARRISON.

(OPEN YOUR EYES.)

BANK OF ENGLAND—THE DANGER TO THE COUNTRY.

More evils result to the people of this country from the system of banking now maintained, than from any other individual cause; and until some serious alteration is effected, it is quite impossible that the great commercial transactions of this country can be managed with either ease or comfort. For a year or two we have overwhelming prosperity. Every hand is engaged, and the enormous machinery of the country in full operation. Our ears, from week to week, are dinned with commercial and manufacturing prosperity, and our Chancellors of the Exchequer are, from time to time, announcing to the world that all this prosperity is fixed upon a solid and permanent basis, just as Mr. Robinson, now Earl of Ripon, did a few months before the panic of 1825. Only he did it in a more lofty and sonorous style than has been common of late years, for he added, that "it was a blessing dispensed to the people through the portals of a constitutional monarchy." Now it is impossible to believe but that these men know that our whole system is hollow, and that there is not the most remote chance of it being otherwise, so long as the debt, commonly called national, remains in its present state.

It is commonly reported, and as commonly believed, that the charter, lately obtained by the Bank, cost that establishment five hundred thousand pounds—a pretty large sum! Inquisitive people are very apt to put the question, What was all this paid for? The very idea of a private establishment, paying so large a sum for the purpose of obtaining a monopoly, is very well calculated to excite a suspicion that there has been an expenditure somewhere that is rather difficult to be explained. It has, however, been sanctioned by the proprietors, whatever was the amount, and were it not that the Bank, from its management, can, when it pleases, and often does, conduct its own affairs in such a way as to do serious injury to thousands of the trading community, we should never have thought of noticing it.

On the late renewal of the charter, Lord Althorp, the then managing man for the public, bound the bank to make statements of their affairs at certain given periods, in order that all might know

how they stood, or in other words, to enable the mercantile world to judge of the prudence and the propriety of the management of the directors. Unfortunately in all statements of this kind, it is easy for those who make them, to put such a face upon them, without any fraud, or intention of fraud, as to deceive the most keen-sighted observer. In the present case, perhaps, it might be that, by men not understanding the nature of their own operations on the currency, they soon deceive themselves; at any rate, as the directors of the Bank can scarcely be considered free agents, all the blame of whatever has been amiss in the management of the currency, for some time past, must not be attributed to them. It is on the government that the blame ought to fall; and if the directors were making erroneous statements, or drawing erroneous conclusions from the statements made, Spring Rice, as our finance minister, ought long ago to have directed their attention to the subject. No such thing, however, took place, and the error was allowed to go on till the directors perceived the Bank itself to be in danger.

Colonel Torrens, after the mischief was done, in a few sentences, showed that they were acting upon erroneous principles, and that it was quite impossible that any other result could have taken place, than the one which now presses so severely on the commerce of the country. And it would be extremely foolish in any man to act under the impression that the pressure is now over, and that the monetary system will now work itself right. And almost equally ridiculous is it in the ministry to lay the whole blame on the Joint Stock Banks. A complete examination ought to be made into the whole banking system, and such arrangements gone into as will, in future, secure us against those periodical extensions and contractions of the currency, that so rapidly raise and depress the prices of all commodities, to the ruin of many in the latter case, and making the fortunes of some in the former, turning all commerce into a game of chance, and sickening, perhaps destroying, those sober industrious individuals, who never make speculation any part of their business.

Every individual in trade feels the effect of these changes. Comparatively few know how they are produced, and at the present moment it is a common thing to hear merchants on 'Change wondering what has become of all the money: so long is it before men, whose daily occupation is about money, understand its nature. On this, at present, it is not necessary to make any remarks. It is enough for our purpose that all men admit its being in plenty at one time and scarce at another—that at one period every man in the country is in full employment, and every machine in full work; and, that, at another time, thousands are without work, and the machinery rusting for want of the means to put it in operation, or of a demand for the article which these are usually employed in producing. To say that all this is caused by our orders from abroad ceasing is pure nonsense. We have before shown that our exports, or in other words, the demand for our manufactured articles, must be in exact accordance with our imports. In fact, this needs no showing; every man, who knows that "nothing is got for nothing,"

must perfectly understand this; and what holds good with an individual holds good with a nation in this respect.

But the evils and the inconveniences above noticed, are not the things in themselves, that make the undulations of the currency an object of such alarm to many. There is something beyond which may well arouse the most stoical to thought and reflection. Now that it is fairly demonstrated, as we are entitled to assume it is, by Colonel Torrens, that all the *deposits in the Bank ought to be classed in the circulation*, rather than with the securities which they hold, the cause of fear is far more real, and far more alarming than it ever appeared to be. From the last published statement of the Bank, so far as we recollect, the deposits were about from 13 to 16,000,000, (it matters not whether we are a few millions wrong or not,) and the gold in the coffers of the Bank about 4,000,000, that is to say, about four or five shillings in the pound on the deposits, without at all taking into consideration the 17,000,000 of their notes in circulation. Now, suppose for a moment, that all the depositors of money had made their appearance at the Bank with cheques in their hands, and demanded gold for them; is it not clear to any man that the Bank must in a very short time have closed its doors,—that is, it must have stopped payment.

But we may be told that such a thing can never happen as that all their depositors should come at once, and that coming separately there will always be time to make provision for them. In ordinary cases this is true, but as Paine said, "public credit is only suspicion asleep," and if suspicion should awake, what would become of the Bank. Besides, we are never to forget, that, in 1825, Mr. Huskisson, in his place in the House of Commons, stated, that at that time, the "nation was within 48 hours of barter." This was delicately said, and the import of this speech was not generally understood; but it meant that the Bank was so drawed of gold at that time, that a run of 48 hours more would have shut it up; and it was only relieved by the run ceasing, and a large supply of gold arriving to its aid from the Bank of France. Even at the passing of the Reform Bill, when the Grey ministry was turned out, and Wellington threatened to take office, so great was the run and so great the alarm, that nothing prevented him from taking office but the fact of the Bank not being able to stand it. Grey returned to office, and money affairs got back again into their natural channel. Does any one now believe that at that time Wellington was prevented from taking office only by his inability to form a ministry? If he does so, we tell him that as the Bank hangs in some measure by the government, so the government exists by the security of the Bank, and a message from the governor would stop the boldest man in the country from becoming minister.

Keeping these things in mind, we would ask, is this a *proper, is it a safe state for the monetary affairs of a great country like this to be in?* To this question every person will be prepared to reply, that it is disgraceful to those who manage these affairs, whether such a state of things be the result of ignorance or of something worse,—and yet the quiescence of the people under such

management proves very distinctly, that the real position of the Bank is not fully understood, and that they are not aware of what would be the effect, if Mr. Huskisson's "state of barter," which has been so often quoted, were really to take place. In a question of this kind, a man may be allowed to look forward, and by the aid of his imagination to picture the scene, provided such a panic as that of 1825 should again occur, and to suppose that it might continue 48 hours longer. This, we trust, is not beyond the proper limits of public discussion.

Suppose then the Bank drained of all its cash, and obliged to shut its doors against the applicants, every other Bank in the kingdom must of necessity follow its example, for this plain and simple reason, that they have nothing to give for their own notes, or in payment of their debts, but the notes of the Bank of England. The government has no means to pay the army, or any part of its officers. No man, who is not possessed of some exchangeable commodity, can obtain the means of subsistence for a single day. The farmers, and country people generally, decline bringing their goods to a market when there is nothing to be had in return. Starvation, in its worst form, would penetrate every alley and corner of this metropolis. The people would spread themselves over the country, and take possession of food wherever they could find it, and in many cases it is to be feared not without violence. The army has mutinied for want of pay, and perhaps organized a system of plunder; the government is at an end; and revolution, in its most alarming shape, has spread over the width and the length of the land.

This is "to be in a state of barter," and yet, though twice in the space of twelve years, we have been on the brink of this precipice, no effectual measure has been adopted, or even attempted, to remedy the evil; and what is more, it is very doubtful if the evil can be remedied, unless the landlords and the aristocracy generally, will quietly *relinquish many of those things which are now ranked amongst their rights and privileges*, and unite all their efforts, with those of wiser men than themselves, in the prosecution of such measures as are necessary to reduce the enormous debt of the country, and to diminish taxation. The church and the crown property, which must sooner or later be applied to this purpose, would be wisely applied now: at some future time it may be too late. Another panic may take them by surprise, and in that case the debt would be dissipated, "like the baseless fabric of a vision." Not a farthing of dividend would be left. Or if by any chance, what is termed the monied interest, should slip into the position of managers for the public interest, the estates of the landlords would be sold to the highest bidder for its liquidation. This is the prospect before us, unless a better system of currency can be devised, suited to our present condition, which Cobbett always maintained, during his latter days at least, to be a thing beyond the power of any human being. A short time will show us the course that our rulers mean to adopt; most probably we shall again have one pound Bank of England notes, with legal tender super-added, and *then* comes the END.

THE HOUSE OF COMMONS.—THE SQUIERARCHY AND THE LABOURING CLASSES.

It is sickening to read the mass of words and the little useful product of the House of Commons—that house may justly be termed, the exhibition of wordy fallacies; the place for uttering by-gone crudities.

The squierarchy and the aristocracy meet to speak stuff that the people have long since seen to be worn out; which many of the dull-witted squierarchy, nevertheless, imagine will pass for profundities; and which, the more subtle among them, those of the Surface school, think, by skilful glossing, may yet pass as words of sense and substance.

The country gentlemen, so called, are blind, and cannot see afar off; and the Surface party, the half-bred aristocrats, who are tolerated, because useful as instruments, are tossed about by the conviction that the people know, and that the coming change is near; yet the hankering after the tinsel of aristocracy has so bound them, and their families, and connexions, round with circumstances, that they are driven on against their better convictions.

The people know that the squierarchy and aristocracy, as legislators, are fools, and something more.

The Peers and the House of Commons may justly be compared to the cable towed behind a fast-sailing vessel, to keep it with the heavy and dull sailers; they are a drag upon the onward progress of the nation.

If the House of Peers be called the house of incurables, the House of Commons may be called the house of wordy twaddlers—spouters of dead verbiage—men who meet to bury the nation's business under a mass of words, and to postpone the day of the people's emancipation from rigmarole and extravagance. The people have long since passed by their rulers in the knowledge of things useful.

The democratic principle is fast undermining the incurables and the twaddlers; and whilst the aristocratic leaven, of which they are disproportionately possessed, induces them to be active in dealing adversely with the people's rights, their fears at the same time teach them, to seek to disguise their procrastination of everything good for the people, by the dust of words.

The House of Commons is the great wordy Babylon, the mother of verbiage, skilled in the delusion and the harlotry of words—in that art, which, by tricksy words, defies the matter.

Time was when it was told the people, that is, such of them as thought and spoke about the matter, that they had nothing to do with the laws but to obey them; and those who were not satisfied with this answer were transported or hanged; and by way of lessons in the paternity of kingly governments, some were ripped open alive, and quartered, to teach survivors to love mercy, and walk humbly before their rulers.

After this came an age of delusion and drunken glory—gunpowder—human destruction—the triangle and the cat-o'-nine tails—mixed up with a wordy mystification about Britannia ruling the waves—and roast beef and plumb pudding—Jack tars—gold galore—true blue—and wordy craft of all kinds; to which the people listened—lent their money—threw up their caps—and cried, hurrah; and the rulers shared the spoil in places—pensions—golden epaulettes—colonelcies—governorships—ambassadorships, and all the various forms of national extravagance. But the time *is* that the people are enquiring what they have gained, and they find a great debt—great jails—and starvation.

They hear a prodigious outcry about the cost of the poor, whom this governmental extravagance, and these false incitements have created, and hosannas to the working of the new poor law; by which, though at the expence of much suffering and belly nipping, it is boasted that two millions per year may be stinted out of the poor, by coarser food and less of it; and they find, at the same time, a law perpetuated, by which they are prevented from buying cheap food, and are robbed of twenty millions annually. The paternal legislature, formed of landlords, robs them of twenty millions for themselves as landlords; and then they hear those same landlords, as legislators, boasting that they teach the poor independence, by ascertaining the minimum of food on which they can subsist, when kept in herds, in human pens, denominated union workhouses.

During the war, the clergy and legislators kept them ignorant, and encouraged early marriages: they then wanted men for slaughter.

Then came Lancaster and the dissenters, who began to teach the people, and then the church-o-cracy joined out of fear. The people are now manifesting the wisdom flowing from knowledge, and seeking a voice in the government of their country.

They used to be content to be led by the squires, who themselves were led by the parsons, who were led by their patrons, who were the aristocrats of the two great parties, Whig and Tory; and thus the whole human mass were moved to get drunk, break their own heads, and shout church and king, and no popery; and to return lordlings and borough-mongers' nominees to Parliament, to continue the saddle on themselves; but now they throw off their leaders, and have the wisdom to see, that labour, the source of all wealth, and the labouring classes, the possessors of that labour, are not represented, and are, *therefore,* not cared for; that laws are made to hang, to transport, to whip, imprison, and starve them, and that they have no voice in the passing of those laws, and they are wise enough to see that men, so circumstanced, may be called free-born Englishmen, but are, in reality, born slaves. The unions of the working classes, and their determination to meet separately, to choose their own chairman, and CONDUCT THEIR OWN BUSINESS, is a sign of progression most important for the cause of truth and plain speaking. Truths are strangled, when great men preside over the meetings of the humble and labouring classes; truths are

spoken when they meet among themselves, and become strongly impressed by repetition, and the efficacy which sympathy always gives to a truth received, with the assent and authority of numbers. We trust the working and productive classes will adhere to this practice; that they may conduct all their associations without patronage, and their committee and officers should all be chosen from among themselves; and, above all things, we trust they will do this upon political subjects. Adherence to this plan need not shut out the advantages of superior lecturers, provided only that the labourers are the hirers; because whilst their committee and managers are of their own class, and have the selection, the lecturers will feel it to be their interest, if they do not speak out with the fullness and homeliness of truth, at least not to pervert it.

AN ESSAY ON THE CHARACTER AND THE SOURCE OF THE DISAGREEABLE FEELING SUGGESTED BY THE OBSERVATION OF UNCLEANLINESS OF THE PERSON.

Read before the Anthropological Society, February 1837, *by* Jonathan N. Rawson, Esq. *of Manchester; Corresponding Member of the Anthropological Society.*

Mr. President and Gentlemen,—Having, for a length of time, had my attention particularly directed to the disagreeable character of the feeling, suggested by the observation of uncleanliness, I have endeavoured, by a strict comparison of cases, which have come before me, to attain some phrenological explanation; but, till the year 1834, with little success. At the latter end of that year, I made some deductions; these, having a more particular reference to the difference between individuals in regard to *personal* cleanliness. One individual is extremely annoyed by the smallest particle of foreign matter, intruding upon the snowy whiteness of the cravat; and should an atom of dust, or a thread, presume to encroach on the glossy texture of the outer garment, it is displaced with hasty precision. Another individual is utterly regardless of these encroachments, even when on the person itself; and his total and general want of concern at the observation of the clotted filth, in which he is constantly enveloped, affords, even to a person moderately clean, an opportunity of comparison.

Having doubts as to the correctness of the organ of order being that to which the horror of filth is to be ascribed, the question occurred to me, *whence does this horror of uncleanliness of the person result?*"

In attempting a reply to this question, it seems advisable to notice the functions of the organ of order, to which this feeling has been referred.

Order implies arrangement. No arrangement can exist in reference to a single object: some other thing must exist, in refer-

ence to which the single object can be arranged: arrangement, therefore, implies more objects than one. In the activity of this organ in connexion with the other intellectual faculties, the relations of the qualities or the uses of the several objects being perceived and determined by these faculties, this organ is then enabled to make the arrangement most desirable for the accomplishment of an ulterior object. In the arrangement of colours, for instance, the ultimate intention being to produce an effect, which it is imagined, may be attained, the organ of colour takes cognizance of the different colours, and, with the other intellectual faculties, of their contrasts; while order perceives and obviates the original confusion, thus accomplishing, if possible, the end desired. Other illustrations of the organ of order in its functions might be adduced to show, that, the end and the means being perceived, this organ suggests a direction to the accomplishment; but, in no case do we perceive, that these functions at all embrace a peculiar regard to personal cleanliness. To decide the question, whether or not the functions of this organ at all embrace personal cleanliness, we must refer to nature, to observation, to experiment. I shall notice two cases, coming frequently under my notice.

A. has a large organ of order, and is strictly attentive to the arrangement of every matter or thing, which his avocations lead him to deal with. Other objects appear frequently to be sacrificed to the gratification of this organ. A delight is experienced at the sight of confusion, inasmuch as, it affords an opportunity for the production of the pleasure arising from re-arrangement. A. further enters with eagerness into extensive plans of construction and arrangement, which perhaps are never accomplished, because some new scheme of the same character attracts his attention. Each function, connected usually with the organ of order, is more or less conspicuous in his actions: but, although there is not an absolute, there is evidently, *a comparative disregard for cleanliness of person:* and, in some respects even, for the cleanliness of any thing which he uses in, or produces by, the exercise of his order and constructiveness.

B. has a large organ of order, and is remarkable for his want of attention to cleanliness.

Several other instances might be quoted, were my object merely to show that the organ of order is not the source of that remarkable regard for cleanliness of the person, displayed by many; but being satisfied that the same means of coming to a conclusion, namely, observation, is possessed by each member present, I shall not refer to any more coming under my own notice.

I feel, however, perfectly satisfied, that we must look elsewhere for the cause of uncleanliness of the person.

We all are aware that to each mental faculty belong *perception*, *memory*, and *imagination*, as three distinct conditions, or modes of action. We say that the organ of individuality, by means of the senses, perceives an object, (this is its perception;) retains the impression of that object after it is removed beyond the reach of that medium, (this is its memory;) and, if necessary, can still

imagine its presence, (this is its imagination.) The other perceptive organs recognize the several properties of that same object, according to their several relations to those properties; each organ possessing the attributes of perception, memory, and imagination; for though individuality holds fast the object, it neither perceives, recollects, nor imagines the form, size, ponderosity, colour, &c.

Viewing the senses of sight, smell, hearing, taste, and feeling or touch, as so many distinct and peculiar faculties of our nature, (as by the same analogical mode of reasoning adopted in proof of the distinctness of the other more strictly called, *mental* faculties, they can be proved to be,) they will appear to be endowed with perception, memory, and imagination. The *activity*, too, of each sense will, like that of the other faculties, be subject to the modifications arising from the temperaments; and the *power*, by the character of the nervous and physical system. It might be interesting to run through a portion of these changes, as it would be impossible to embrace all, which, to use a belfry term, might be rung upon the effects produced by these attributes, in their connexion with the external senses, operating in connexion with the other faculties, and to dive into the innumerable associations, urged upon them in their active conditions by that tide of causes, viz. external circumstances. But this field at present I decline traversing. Phrenologists, at the present early period of the history of the science, in tracing back the manifestations of mind, are perhaps rather too sanguine in the supposed discoveries of the ultimate sources of each discovery made by them; and thus are prevented instituting a searching examination into the agency of the mediums, through which outward causes proceed to the exciting of general or particular faculties; and run the risk, therefore, of attributing that to a mental faculty, which is in reality the effect of the activity of the sense, constituting one of the mediums described. These remarks are practically illustrated, at least so it appears to the essayist, in the circumstance that the feeling of personal cleanliness has been referred to the organ of order as a cause: whereas, with this organ, this reference seems to be a matter of association rather than an effect, philosophically deduced from the manifestations of this organ.

On this point certainty exists, namely, that when the organs of the intellect are brought into activity at all by perception as a grand first cause, one or more of the five senses must have been in operation. It hence appears that the enquiries, when considering the operation of the mental faculties, which sense has been the medium for their excitement, and how far the manifestation, attributed to the faculties, has been produced by the operation of that sense alone, are legitimate and well worthy of the attention of the phrenologist.

Through similar states of thinking my mind passed, and I was led thereby to the conclusion, that the *first* sensation in the disagreeable feeling, suggested by uncleanliness, is the *contact* of the object, constituting the uncleanliness with the skin. This being felt is the perception, as connected with the sense of touch or

feeling: the sensation, (or in the words of the title of this Essay) the character and the source of the disagreeable feeling, suggested by the *observation* of uncleanliness of the person, is attributable to the memory and the imagination of the same sense, or more peculiarly to the latter in association with the observing powers: as, if we see uncleanliness in contact with the skin of another, we sympathize with the supposed state of his sense of feeling by the imagination of the same sense in ourselves, reproducing the state of that feeling which we have previously experienced under the same circumstances. It is to a *peculiar power and activity*, or *acuteness in this sense*, considered *as a faculty*, that I refer that *particular attention to cleanliness*, before noticed

It is a legitimate object of inquiry how far such organs, as love of approbation and self-esteem, may induce attention to cleanliness: and it is granted, that, under extraordinary circumstances, a sense of touch less acute may be forced to perceive that, which to a more active and lively sense, would have been long previously an annoyance. In this way the vain man exercises his intellectual powers, so as to remove all probable sources of disapprobation being extended to him. The proud man also may, under some circumstances, detest encroachments upon his hallowed person; but, in the want of integrity in this sense, it is most likely that such encroachments would not be perceived, or, in the vain man, other modes of obtaining approbation would be more congenial. Admitting, however, that the other mental faculties in pursuit of gratification, may sometimes have the tendency to excite or heighten the operations of this sense, this is quite common to the operations of all the organs. Love of approbation, in the aid of imitation, may enable an individual to appear religious by inducing attendance upon religious meetings; and, by such means, an excitement of even a moderate veneration may occur, and by the constant regularity of that excitement, veneration may become habitually active. By a similar course the sense of touch also is liable to habitual or periodical activity. Self-esteem and love of approbation, in connexion with a lively sense of touch and the more natural activity possessed by youth, may present us with the pink of fashion and of neatness; but the latter quality is sometimes greatly modified in the absence of some essential ingredient, which, I infer, to be the *acuteness of feeling*, which leaves the first mentioned organs only to suggest (for adoption) the "outre" of fashion. Again, we observe persons, plain and unassuming in dress and manner, frequently displaying a precision as to cleanliness of *dress*. Such persons, as far as my observations have extended, are equally precise in regard to the *person*. The former kind of cleanliness I should, in such cases, mainly attribute to this sense, (granting, at the same time, an association with the faculty of order), as it evidently consists in a recognition of something out of place, exciting repulsive feeling, much more extensive than an offence against the mere love of arrangement.

All adhesive kinds of matter, which, in their use or employment we have observed to annoy *the sensibility of the cutaneous mem-*

brane, on which the diffusion of the nerves of feeling takes place, become objectionable in their contact with that membrane, and to sensibility are sources of annoyance. I may present, by way of analogy, a similar operation in the nerve of *taste.* Over the surface of the tongue and the inside of the mouth the nerve of taste is diffused. We admit the same attributes to this sense as to that of touch—If to a child an unpleasant medicine be administered through the medium of, or mixed up with, preserves or any other palatable associate, the medium is, in many cases, ever after regarded with antipathy, until a new association annihilates the antipathy: otherwise they always remain objectionable to the taste, by exciting the recollection and the imagination of the taste, originally connected with them. This analogy illustrates perhaps more forcibly the process of the associations, into which the senses are liable to enter with the observing power of the mind.

To conclude: I trust I have satisfactorily shown that the disagreeable character and the source of the feeling produced by the observation of uncleanliness, *are not to be traced to the function* of the organ of *order:* but that a peculiar regard for personal cleanliness, and the disagreeable feeling produced by the observation of its reverse, are referrible *to the power* and the *activity,* or, in one word, to the *acuteness* of the *sense of touch* in connexion with the observing powers.

THE EARTH AND MAN.

BY E. J. HYTCH.

This world is not a fountain fill'd with woe;
And spots are seen, which to the mind-lit eye
Seem like some orb where joy can never die;
Too oft the cares which erring man doth know,—
And which, in sorrow's smileless overflow,
He thinks with heart subdued, and many a sigh,
Are the fell portion of earth's tenantry,—
Spring from himself, nor do in nature grow.
So should we not repine; but let us feel
Earth is a blessed spot to those who trace
The joys which dwell upon her tearless face:
For nature naught of beauty doth conceal
From him who hath an eye to seek the grace
And power, which even clouds and storms reveal.

BRITISH MUSEUM.

This national establishment will be opened during the Easter, Whitsun, and Christmas holidays, in consequence of the recommendation of the select committee of the House of Commons.—This one fact shows strikingly the progress of mind in the classes engaged in manual labour: because this extension of the time of exhibition would not have been granted, unless the demand for the gra-

tifications, connected with the Museum, had been so extensive as to demonstrate that a class required these gratifications, who could not obtain them, except under the circumstances presented to them during the continuance of holidays. We may be sure of this as a truism, that no supply will be given by any existing government, unless there is a demand ; and a supply of gratification, as in this case, being granted, the existence of the demand is thereby proved.

THE BOOK OF MOLOCH

Chapter V.

The Clergy's Reward.

1. In all your gettings, get *money ;* now, therefore, when ye go forth on your ministerial journey, go where there are silver and gold, and where each man will pay according to his measure. For verily I say, ye must get your reward.

2. Go ye not forth as those that have been sent "without two coats, without gold or silver, or brass in their purses ; without scrip for their journey, or shoes, or staves," but go forth in the good things of this world.

3. And when ye shall hear of a church that is vacant, and hath no one to preach therein, then be that a call unto you, and be ye mindful of the call, and take ye charge of the flock thereof, even of the *golden* fleece.

4. And when ye shall have fleeced your flock, and shall know of another call, and if the flock be greater, (or rather) if the fleece be greater, then greater be also unto you the call. Then shall ye leave your old flock, and of the new flock shall ye take the charge.

5. Those who have "freely received, let them freely give;" and let not men have your words "without money, nor without price," but bargain ye for hundreds, and bargain for thousands, even for thousands of silver and gold shall ye bargain.

6. And over and above the price for which ye have sold your service, take ye also gifts, and be ye mindful to refuse none, saying, "Lo, I have enough;" but receive gifts from them that go in chariots, and from them that feed flocks, and from them that earn their morsel by the sweat of their brow ; take ye, also, the mite from the widow.

7. Yea, take ye gifts of all, and take them in gold, and in silver, and in bread ; in wine, and in oil, in raiment, and in fine linen.

8. And the more that the people give you, the more will they honour you, for they shall believe that "in giving to you they are giving to the Lord;" for behold their sight shall be taken from them, and they shall be blind as bats, and "shall know not what they do."

9. And ye shall wax richer and richer, and grow greater and greater, and ye shall be lifted up in *your own* sight, and exalted in the eyes of the multitude ; and "*lucre*" shall be no longer "*filthy*" in your sight. And verily ye have your reward.

FINSBURY DISCUSSION SOCIETY, Wednesday, 1st of February, 1837.

Question—*Is the female mind equal to the male?*

The President, Dr. Epps, in the Chair.

The minutes of the former meeting were read and confirmed.

Mr. Burn having informed the meeting that he had arranged with Mr. E. Thomas, that he (Mr. Thomas) should open the question, Mr. Thomas proceeded to open the subject, "Is the female mind equal to that of the male?" He stated his motive for introducing this question to be, that, by fair argument, unprejudiced by personal feelings, the matter might be discussed; and that the discussion of the question was not for mere amusement of a few fleeting minutes, or in respect to trifles; and that it was not his intention to attempt to ennoble man to the disparagement of woman, or to flatter the weaker vessel by placing it above the stronger; for he held such an attempt, without enquiring into the merits of each, erroneous. Truth was the motto of this society, and for it he would at all times seek; and it should be far from him to give to him, who claims to be lord of creation, more than he merited, or to her, who is the last and best of the Creator's works, undue panegyric. He alleged that two opinions respecting the mental powers of women, as opposite as the antipodes, exist. So great was the feeling in Arabia, that the Bedouin Arabs, by the presence or voice of the fair sex, would be arrested from slaying their opponents and reduced to calmness. In some places, woman is degraded to a parallel with the brute, and treated as the slave and the drudge of man. The latter, however, was much less the case in the present enlightened time, than in a less cultivated period; but, even now, by many, woman was not considered to be "a helpmate for man," although for such she was given to him, and declared to be such by the Creator; one whose mind might vie with his, whose intellect might brighten his, even as iron sharpeneth iron: whose imagination might fertilize his, and whose judgment correct his, if wrong, or confirm it, if right. Did he not consider woman's mental powers equal to man's, he would not have appeared as her champion; he wished not to use language savouring of adulation, but in two words to say, *fiat justitia*. Mr. Thomas then viewed the sexes in infancy, and declared the male to require more attention; he did not walk or talk so soon as the female. Girls also acquired knowledge more quickly, and their memories were more retentive than boys. And he thought it would be admitted, that, in mind, woman was equal to man, taking imagination, research, perception, capaciousness, and other points. Women from birth seem to inhale a poetic air and elasticity of

spirits; by these she, with greater ease than man, can show the brighter tints in life's picture. The lofty lyre, when touched by the graceful hand of woman, has produced the sweetest sounds to charm the ear; and woman might with propriety demand a laurel. In regard to *prose*, De Stael might throw down the gauntlet, and who would move his hand to touch it? Names, he said, would swell to a great catalogue, were he to adduce them to prove woman's claim. In research, was not woman very persevering and diligent? In respect to quickness of perception, he argued woman was superior to man, and in reference to memory and capaciousness, to her the palm must be ceded: compared Elizabeth Carter with Porson and Parr, and named others of the fair sex who had claims to a similar rank; and concluded by deploring the imperfect education given to woman, and attributed the apparent inequality to it.

Mr. Beliby stated he did hope to have heard proof of woman's equality, with men; truth was his object, and reason his guide; and he should enquire what each sex had done. He admitted education did make a difference, but looking at the uneducated of each sex, he could not think them equal: he had been engaged in education, and found females more ready at drawing than at classics, the female mind more imbecile than the male, and not given to learning that required a stretch of mind. He stated woman had done much to the gratification of mind and the comforts of life; and to raise the morals and the intellectual character of society, yet, he saw no mind like Bacon's, Milton's or Shakspeare's. There were some philosophical writers of the fair sex, but, man was like the effulgent splendour of sun at noon-day, woman like the faint beams of the morning. He admitted woman's claims for patience, calmness, dignified composure—sacrifice of comfort, and incurring of labour for man—and stated her benevolence and kindness were of an exalted and invaluable character; but he could not admit her right to a level with man in mathematical and classical learning; he wished women to do what they could, and to be properly assisted by a sound education, so as to progress with man in knowledge.

Mr. G. Burn solicited serious regard to the mighty consequences of unduly depreciating woman, and showed that as the Deity had implanted with gifts a consciousness of their existence, no superior minded woman could feel properly dealt with if undervalued, and must, in proportion to the want of estimate, become indifferent to the exertion of her powers, or displeased: he cautioned man against injuring himself by destroying his domestic comforts by underrating his wife. And he argued, that Mr. Beilby was unreasonable and ungenerous, in asking woman generally to do as man, when woman was kept from knowledge, as well by injunction as general usage, in respect to education. He however proceeded to show from the cases of Solomon's mother, Alfred's, Doddridge's, Lord Bacon's, the Hon. C. P. Curran, Josephine, and Lady Hamilton, what woman could do in respect to children and husbands; and argued from Mrs. Somerville's book, the power of the mind of woman.

Wednesday, 8th February, 1837.—*The President in the Chair.*

The minutes of the former meeting were read and confirmed.

Mr. Munday then rose, pursuant to his motion of adjournment, and proceeded with the question, "Is the female mind equal to the male?" He enquired whether he was to consider the sentiments as well as the intellect as constituting the mind. This he felt disposed to do, thinking it would explain the difference between the sexes. He then adverted to the conduct of women towards children, in bearing their simple talk, which he argued women could not endure had they strong minds like men: for men could not bear it, but sent children away from them. He did not wish to lessen the value of the fair sex, but begged to be understood as holding women to be fully capacitated for all the virtues and social duties, the rules and the principles of which being simple, did not require greatness of mind for their apprehension and performance. He thought Mr. Burn should have borne in mind, when he cited the passage from the 31st chapter of Proverbs, "She openeth her mouth with wisdom," that the fear of the Lord is represented in the same book as the beginning of wisdom. Women could write, and had written, best on religious and moral matters, they could also do creditably in fiction; but, in deep learning or science, they could not equal the powers of the male. Their education and opportunities were not as man's, and these had some effect.

Mr. Williams (who had seconded the adjournment) next addressed the meeting. He was of opinion that the mental capacities of women are equal to those of men; and inferred Mr. Beilby had no knowledge of phrenology, otherwise he would have arrived at a conclusion different from that which he had. Mr. W. asked, Does there not exist a great degree of intelligence in the head and the countenance of women? Mr. Beilby had said much about classics, and the inability of women to cope with them, but he thought women had all the requisite powers for their acquirement and use; recollection, and a ready utterance, were all that are wanted, and the fair sex had these. How do foreign ladies speak their native languages? are they inferior to the male anywhere? How do ladies learn French, Spanish, or Italian? are they less ready than males? They are more ready, and if they could perceive the utility of acquiring the *dead* languages, they would be forward in doing so. It was easy to understand how boys could be shown the value of the dead languages and mathematics, since as lawyers, doctors, architects, engineers, or navigators, they might want such knowledge. Besides, the classics would not be very fitting for the morals of the females; Homer and Ovid might well be dispensed with in their education. Women's acquirements in the classics and mathematics are quite sufficient to prove their capability. Lady Jane Grey made the learning of the learned languages her study and delight, and as she wrote to her sister Catherine in Greek, we must conclude her sister also knew that language. It was asked by one speaker, Where are your Shakspeares amongst women? He would ask in return, Where are yours amongst men? have you another?

Had Hannah Moore not been restricted by her religious principles, she might have done much in that way. Instances of women's valour, equal to that of any men, are on record. Consider the maid of Orleans, retrieving her country, and making the English quail; remember Boadicea and her heroic speech before battle. In conclusion he answered Mr. Munday's argument, that women were not so strong in intellect as men, because they could bear the prattle of children, by observing that strength, and not weakness, of mind, will enable them to do so.

Mr. Shaw rose and said, he did not think the opener had well proved his case; he (Mr. Shaw) wished to know where such characters as Moses, David, Solomon, Isaiah, Jeremiah, St. Paul, Virgil, Homer, Cicero, Demosthenes, Fox, Canning, and Brougham, could be found amongst females? Still he believed, that if woman had the same opportunities as man, she would be equal in science and literature. Were men placed and educated as women, they would show the difference very soon, and were women privileged, as men, they would avail themselves of the benefits. Women did not and could not very conveniently travel as men, and much knowledge accrued from travelling. In oratory women can surpass men: they are so fluent, and could talk with eyes as well as tongue. Mr. Shaw then read an extract from the Parthenon, in favour of women, and argued they are equal to men.

Mr. H. Thomas said, all the arguments in favour of women had been hypothetical; that the situations of the sexes are so different as to render it necessary they should differ in mind; and it would be impossible for him to think women fit to govern countries, or act in the important duties of life. Girls and boys in the nursery manifested differences; a girl wanted a doll, a boy would prefer ships and rude sports. Married persons find it better to have domestic comforts, than learned wives, and want the sober realities of life. The evil of female government was seen in Mary of England, and in women in other countries. In scripture we find women are enjoined not to talk in churches.

Mr. Henning insisted there could be no reasonable doubt that women were equal to men. Mr. Adam thought well of his wife, and called her the mother of life. He did not think it right that women should go through bad classics, but they could acquire the languages. He knew many learned ladies. Mr. H. noticed the constituents of mind: reason, good sense, (sometimes called common sense,) understanding, judgment, intellect, conscience, conception, talent; genius, all these are essential to right mind. Mind, he stated, might be stupified by folly, or brutalized by madness; but in right order its produce is splendid, lively, and beautiful: its high excellence is to give grace to its words and power to its deeds. Sage *reason*, is the great minister of the power of the mind, and, being her faithful servant, will not indulge in any extravagance; the spirit of her councils ever marks the true points which the circumstances of reason, condition in life, and the benevolences of human conduct, ought to induce. Good sense is that kind of knowledge which we have acquire dfrom our

first love, "our mother," and may be called cradle knowledge. Happy the man, and blessed the woman, who may have had a good mother. Good sense does not ramble beyond the powers of the understanding, and judgment; it therefore is not liable to be the dupe of quacks, or the tool of knaves. It never uses ridiculous language, nor is it perverse or capricious. The understanding, cherished by science, ripens into judgment; conscience is the true witness of right mind and pure heart. Intellect is ingenious and penetrating; genius may be also called talent or capacity, though it is applied to great powers in philosophy, poetry, or art. Sometimes it is taken for mere inclination. Genius or talent, is always fertile in resource, and happy in execution. Mr. Henning argued that females have all the qualities of mind he had enumerated: referred to the influence they have over the public mind, compared Britain with Turkey, and then called upon the society to consider what may have occasioned the wide difference in point of mind; which he considered to be the *degraded condition* of Turkish females. Mr. H. then compared Queen Elizabeth with the other European sovereigns of her time; with Jemmy her successor, and argued that the comparison would not be against her; Queen Caroline he contrasted with George IV. and referred to the excellent answers* given by her to the addresses, which were presented, as indicating a great superiority. Mr. Henning came to the conclusion, that the female is in all things equal to the male, having the same education and opportunity; and remarked, that the universe did not present a more pleasing spectacle than the mother of a family, surrounded with her young shoots, arranging and directing the labours of her household, and sweetening the comforts of her husband by a prudent and wise management.

The question was adjourned on the motion of Messrs. Rait and Loosely.

Wednesday, 15th February, 1837.—*Mr. Williams in the Chair.*

The minutes of the former meeting were read and confirmed.

Mr. Rait proceeded with the discussion on the female mind, and observed no one loved females more than he did, but he loved truth more: to ascertain which, we must consult nature and revelation. Nature placed the male of every kind over the female, as might be seen in the cock and the hen. The same in the lion and lioness; and savages, who are so near a natural state, showed the same. He would not assert how far this superiority arose from superior muscular strength, though it might be argued that muscle and mind were, to a certain extent, connected. The male too, he found, usually had a larger head than the female. In revelation, man was represented as the head of all creation, inclusive of woman, and woman was commanded to obey him. Mr. Rait, after arguing the question at considerable length, concluded by stating, that woman's mind, on the whole, is equal to man's; and that in the church on

* These were written by Dr. Fellowes.—Ed.

earth and in heaven the sacred scriptures represented that sex should not be estimated.

Mr. Loosely spoke to the following effect: My attachment to, and the strong desire to gain the "golden opinions" of the female sex, would render it extremely difficult to advocate my views respecting the question under discussion in the presence of so many ladies, did not their attendance at the meetings of the society prove that they possess minds of too intellectual a cast to permit them to regard the incense of flattery as the only offering worthy of their acceptance, or to look upon the individual, who addresses them in the language of unmeaning compliment and senseless adulation, as the only being entitled to their esteem: at the same time affording the strongest possible guarantee, that the open avowal of my belief in man's mental superiority will not draw upon me their displeasure, or subject me to the forfeiture of those smiles I so highly prize. If, Sir, any of the gentlemen who addressed us on the former evening, had shown that the premises, on which they based their conclusions of the mental equality of the sexes, were sound, it would have given me pleasure to have followed in their footsteps; but as none succeeded in showing this, notwithstanding the inspiring influence derived from the knowledge, that their chivalrous efforts were gazed upon by a splendid galaxy of bright eyes, whose lovely owners were anxiously desirous to invest them with the garland of the conqueror, I feel less in differing from them, and standing forward as the advocate of *man's intellectual superiority*. It has been insinuated that such an opinion is degrading to the female sex. This, Sir, I deny; but as I cannot discover in the fair countenances before me any traces of that just indignation, which would be perceptible, if this ungenerous attempt to excite their prejudices had produced the effect wished for, I shall proceed at once, in the first place, to review the arguments employed by the advocates of mental equality; and, in the second, to lay before you those reasons which induce me to differ from them, and to agree with Milton, who, in his sublime epic, speaking of the different sexes, says,

> "For valour he and contemplation formed,
> For beauty she and soft attractive grace."

In pursuance of this plan Mr. Loosely then proceeded to refer to the various arguments urged and examples cited, none of which, he contended, warranted the conclusion at which they had arrived: but as this portion of his address derived much of its interest from circumstances connected with the Finsbury Discussion Society, we shall pass by it, and proceed to notice that which will be more acceptable to our readers, viz. the arguments adduced by that gentleman in support of his own views.

If, said Mr. L., I thought in the course of the remarks I am about to offer, anything would escape which my opponents, with all their ingenuity, could prove to be derogatory to the female sex, I would sit down without saying another word, conscious that any remarks tending to depreciate that sex, (whose virtues have shone forth with such resplendent lustre in every age, as to lead one of our poets to exclaim,

> "There's in them all that we believe of heaven;
> Amazing brightness, purity, and truth,
> Eternal joy, and everlasting love,"

and whose gentle influence has so greatly assisted in humanizing and refining the character of man, as to stamp the exclamation of the same poet,

> "Men had been brutes without you,"

not as a mere figure of hyperbole, but as an incontrovertible truism,) would only recoil upon myself. The question for our consideration, Mr. Chairman and Gentlemen, is, "Is the female mind equal to that of the male?" To the question thus propounded, embracing as it does the mind as a whole, I must confess my inability to reply; for whilst I contend that in *some* respects the mind of man is superior to that of woman, there are others in which it would be absurd to deny *his* inferiority, and therefore, whether the female mind would be found equal to that of the male, when a just balance is drawn, is a point I do not attempt to determine; my opinion is, that the female mind, viewed *as a whole*, and not merely in reference to its intellectual powers, is fully equal to that of the male. But to the question, as it has been argued, viz. whether the female mind can grasp with equal facility as the male, the obstrusities of science, or is possessed of powers, which, if cultivated, would enable her to produce literary compositions, equal in grandeur and sublimity to those that have emanated from men, or render her alike capable of pursuing the harrassing avocations of commerce, of engaging in the intricacies of legal pursuits, of directing the various combinations and guiding the operations of large military and naval forces, of concocting and bringing to maturity political measures for the promotion of the peace and happiness of a large community, or of presiding over and managing the affairs of mighty empires, all which are implied in my opponents' arguments, I say to the question as thus argued, I have not the slightest hesitation in answering in the negative. If asked why I have arrived at this conclusion, I answer, because I firmly believe that the Creator always apportions the powers of his creatures according to the duties they have to perform, and therefore, seeing that different duties are assigned to the different sexes, feel warranted, on this simple ground alone, in concluding, (at least until my opponents can prove that these different duties require a precisely similar development of mental power; or disprove the fact of the two sexes being originally destined by their Maker to fill different stations in society, equally honourable though dissimilar in their nature,) that each is endowed more largely than the other with those qualifications requisite for their particular stations; and consequently, reasoning inferentially, am forced to conclude, that as the active pursuits of life, just referred to, manifestly require a more vigorous and energetic development of the mental powers, than is necessary to enable woman to fulfil the duties connected with the station in which

she was created to move; so man, who was signally appointed by his Creator to engage in those pursuits, is endowed in a larger degree than woman with the powers required by those pursuits, and is thus enabled to prosecute them more successfully than woman possibly can do. It may be argued, that to say the Creator never intended woman to fill situations requiring equal mental vigour and energy with man, is a mere assumption, and, therefore, affords no ground for the argument just adduced. If this were true, my argument would undoubtedly possess very little weight; but this is not the case, inasmuch as common sense favours the proposition on which the argument is based; for no one who reflects, on the physical formation of woman, or contrasts the softness and the delicacy of her frame with the muscular structure of man, will deny that these circumstances render it almost impossible to suppose, that she was ever intended to bear the toilsome fatigue attendent upon the situations which it is more particularly man's province to fill: and scripture establishes it as an undeniable truth, for almost the first mention of the sexes, recorded in the sacred volume, expressly assigns the active pursuits of life to man, and the more passive duties, connected with the endearing titles of wife and mother, to woman. And tracing the history of woman from that period downwards, we shall find that the sphere of her exertions has almost invariably been confined to the fulfilment of domestic duties: nay, that it is physically impossible it should be otherwise, owing to the Creator having ordained her to be the means by which children are born into the world, and devolved upon her more especially the care and superintendance of her offspring. Seeing then, that women were from the very first designed to be the ornaments of the private and domestic circle, rather than the active participators in public life and duties, and that being so, does not require those strong and vigorous powers of intellect, needed by man, who has to provide for the support of his family, and to discharge the offices of the citizen, the legislator, and the public instructor, we are fairly warranted, on these grounds alone, in concluding, that in certain points the male mind is superior to that of the female. But, Sir, if we take a brief review of what has been accomplished by the two sexes, we cannot fail to arrive at the same truth; for all our most astonishing compositions in poetry and prose, have emanated from the minds of men; all the most grand and bold conceptions of the imagination that glow upon the canvas, are the works of men; all the most sublime discoveries in science and art, by which man is enabled to make even the very elements confess his dominion, are the result of man's intellect: whilst the productions of the pen and pencil, of woman, are those in which beauty, and delicacy, and softness, form the most striking characteristics.

This speech will be concluded in the next Number, and the discussion continued.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[*ανθρωπος*, anthrōpos, *man*, and λογος, logos, *a discourse.*]

No. 9.] MAY 1, 1837. [Vol. II.

PUBLIC WALKS.

BY E. J. HYTCH.

To promote the greatest happiness of the community is the ostensible object of government. This rule has not, however, been reduced to practice: the people have not been regarded otherwise than as the sources of revenue; and our rulers have employed their energies and resources merely in forwarding the interests of their particular faction. When they have considered the nation, coercion has been the medium through which their paternal love has been developed; although government was instituted not alone for the purpose of preventing or punishing crime, but also to take away the pre-disposing causes of vice, and to advance the welfare of that nation whose destinies have been confided to its superintendance. This state of things is, however, passing away, and the wants of the people have begun to excite some degree of that consideration which had been too long withheld. Thus in 1835, a portion of our legislature devoted its attention to considering the best means of promoting the health and the comfort of the people; and the establishment of Public Walks was one of the schemes devised.

Most of the diseases to which the mechanic is liable can be traced to personal uncleanliness. Of his appearance he thinks but little; and this negligence is sanctioned by the example which his companions afford. Toiling from morn to night in a factory, where the breathing a corrupted atmosphere is not the greatest evil, he needs something to refresh his jaded spirits when he ceases to labour; and were Public Walks set apart for his recreation this desideratum would be obtained. But when he passes his leisure hours between his tap-room and his bed, it can excite no surprise that disease is his constant companion. How different would he be were Public Walks established. Pride—that self-esteem which even the most ignorant and brutalized possess—would compel him to abandon his uncleanly habits. Thus comfort would be produced, and health would follow in its train; whilst attendant civilization would root out those disgraceful pastimes and delights which have cast a shade over the British character, and made it a bye-word of contempt and obloquy amongst the nations of the earth. No; an enlightened people will never be a bull-baiting one: a nation which can appreciate rational pleasures will never enjoy the foul cup of intoxication!

Nor is the mechanical the only class of men which would be benefitted by the establishment of Public Walks: to the sedentary they are essentially necessary. The nervous headaches, the palpitations of the heart, the heartburns, to which they are subject, and the jaundiced look declaring their occupation, are to be attributed to that indigestion which is produced by want of exercise. But let Public Walks be established, and they would have other resorts than those of the club-room and the theatre; and the pleasures of the pedestrian would be combined with the health of body, and the buoyancy of feeling which would be necessarily produced.

The population of the metropolis has increased of late to an almost unparalleled extent; and the enclosing of waste lands has been rendered necessary to afford habitations for its citizens. It can, therefore, excite no surprise, that, to many residents of London, a garden is a luxury with which they are scarcely acquainted. Whilst even those who reside in the environs cannot walk in many unenclosed fields without paying the penalty of trespass.

It is true that there are a few places, which are *ostensibly* set apart for the recreation of the people: as an illustration, St. James's Park may be mentioned. But the well-dressed alone have the privilege of entrance; and he who approaches the inclosure, however bright with health and cleanliness his countenance may be, will be refused admittance unless the texture of his garb resembles that which is worn by the well-paid and idle Cerberusses who guard the gates.* But, probably, it may be considered that the mechanic has no right there, or that the mediocracy who lounge in the enclosure would abandon it, if he were allowed to come

"Betwixt the wind and their nobility."

So be it. These persons can receive the benefits derivable from country excursions; but the poor man has no such opportunity. Let him, therefore, have as much of the country as his circumstances will allow him to obtain. Primrose Hill *was* a favourite resort of the inhabitants of London, and the daisy-gathering expeditions were long the delight of its children. This place is, however, no longer eligible, for the railway works have destroyed its beauty, and it now scarcely deserves any other appellation than that of a swamp.

Nor is it the poor man alone who is deprived of the advantage of Public Walks. Is is well known that a terrace is attached to Somerset House with which few can vie; and to breathe the pure air which circles o'er the Thames, is to breathe health and happiness: whilst to see the sailing-vessel gliding over the calm waters, to survey the steamer departing with its animated cargo, or to view the barque laden with the commerce which unites widely separated districts,—all combine to form a scene which not only excites reflection, but exhilarates the mind! But the bright scene can

* The writer has witnessed this scene. One fine July morning last year a clean comfortable looking operative was refused admittance because he was attired in fustian clothes.—E. J. H.

alone be enjoyed by a chosen few; namely, those individuals who are acquainted with the officers, or those who fee the porters.

Thus it is seen that the Public Walks of London are

"Like angels visits, few and far between,"

and that their enjoyment is confined to a limited section of the public; a portion of the people which requires it less than that greater circle which is debarred from the privilege. But should this be? No; the system requires alteration, and altered it *can* and must be. There are many tracts of ground which might be set apart for Public Walks; and if a play ground for athletic sports—such as running, leaping, cricketing—were added, the advantage would be increased to an immeasurable extent. The expence would not be great. A few acres planted with trees, flowers, and shrubs, is all that is required to adorn a Public Walk; and Crown lands are often employed to effect worse ends than those produced by sports and pastimes.

But it is said that the English, unlike other nations, are too fond of meddling; and, were Public Walks established, that the trees and flowers would bear witness to their destroying propensity. That this statement is partially correct it is useless to deny; but whilst we regret the fact, let us not forget the cause. In continental nations picture galleries are common to which all classes have access. There are few cities which do not possess museums and *promenades*, and even a part of the revenue is employed for the support of theatrical amusements. But this is not the case in England. Until very recently no person was allowed to enter Kensington Gardens whose dress was not of the prescribed fashion; and the British Museum was closed against the mechanic. To remedy the defect mentioned, it is only necessary that the people should be treated as rational beings: let them know that they have an interest in the preservation of national property, inasmuch as that it is *their own;* and their destructiveness will be no longer excited. But supposing the habit were not discontinued, shall the welfare of man be sacrificed that a few trees may not be injured? Shall a few clods of earth be considered of more value than the health of our citizens? Shall a few paltry shillings be weighed against the moral and physical well-being of the wealth-producer?

Probably, however, the over-sensitive might be annoyed by children. Let it be so. To the man of benevolence there is no scene which can impart more real happiness than the playfulness of childhood: whilst to the man of reflection it is pregnant with the truth that activity is most beloved when it is most required. But practical deductions have not been drawn from this truth. The children of most operatives are too distant from the fields to partake of its enjoyments: they are not allowed to play in the streets for the obstructions which they would cause, and the vicious manners they might acquire would make the benefit derived valueless. They are, consequently, immured in rooms teeming with the vapour of coal fire, and other gaseous fluids; and their glassy eyes, and

sallow complexions, proclaim the mournful result. The health of our children, therefore, demands the establishment of Public Walks; —surely this reason must suffice.

The happiness and prosperity of a nation can alone be ensured by well-regulated habits; and despotism or anarchy must be eventually triumphant where the *social wants* of a community are disregarded. That political reforms are needed few thinking men will deny: they will, however, prove thoroughly useless unless they are accompanied by, or lead to, a social reform,—one of the greatest of which will be, that of imparting to the mass of our countrymen a desire for those simple pleasures with which nature abounds,— pleasures, which have hitherto been unnoticed or untasted, because an available opportunity has not been possessed!

New Court, Carey Street.

HINTS ON EDUCATIONAL REFORM IN CONNEXION WITH PHRENOLOGY.

To the Editor of the Anthropological Magazine.

Sir,—The highest ambition of the patriot should be to better the condition of his fellow creatures,—physically, intellectually, and morally,—which can by no means be so speedily, so effectually, or so permanently performed, as by a well-directed and systematic system of education,—a system calculated to train the human creature in his threefold condition as an animal, intellectual, and moral being. But before this can be effected, and preparatory to any sure and solid advances towards the attainment of this object, it is obviously necessary to be thoroughly and intimately acquainted with the human mind, and its modes of displaying itself, as well as its relations to surrounding objects. For the attainment of this knowledge, the science of Phrenology is not only desirable, but absolutely necessary. The knowledge of Phrenology is therefore necessary to the true patriot, no less than to the anthropologist and the statesman.

Thus it must be obvious that Phrenology is a *sine qua non* to the teacher. Without a familiar acquaintance with this science, all the most strenuous exertions of the teacher may be lost like thistle-down before the wind, and years of trouble and expence may all prove "labour in vain." As well might the traveller trust himself on the trackless ocean, or through the unknown forest, without compass or guide, as the instructor rashly enter on his sacred calling without the initial step essential to his success.

It is sometimes said in answer to this, then, how happens it that there were successful teachers before Phrenology was discovered; as, for example, Pestalozzi? This admits of an easy reply. It is demonstrated by Phrenology, that certain organs are essential for a successful teacher: and that, *cæteris paribus*, the larger these are, the more surely will success crown his efforts: Pestalozzi,

having these well developed, was eminently qualified to gain fame and name in the pursuit, for which he felt an instinctive predilection, and thus he outshone all competitors; but that he could have done much more, had he been in possession of the invaluable discovery that has created a new era in the annals of education—nay, in those of the human race, can scarcely admit of a doubt,—he himself would have been the first to own it. One of the most celebrated teachers of the present day has declared, that he should have been saved five years of labour had he known Phrenology sooner. The redoubted archer Lokesby, mentioned by Scott, would have vanquished every competitor of his own time, but since the discovery of gunpowder, every one who could draw trigger would vanquish *him:* in the same relation does Pestalozzi stand with regard to the phrenological teacher. Again, George Bidder excelled in arithmetic with scarcely any previous study, but would it be logical, on those grounds, to maintain and support the uselessness of teaching arithmetic? No; we must not erect the exceptions into the rule.

At a time when thorough, searching, and radical reforms are being effected in the government of Britain and Ireland, it behoves the anthropologist to be equally active in reforming the manner of teaching, which, as at present conducted, is a disgrace to our native country. Indeed the ignorance, manifested by some of that class denominated (ironically, I suppose,) "instructors," is utterly incredible, and were such an ignorance displayed by individuals in any other class, as a horse-breaker, or an architect, they would experience as much difficulty as they deserved in procuring employment. But ignorance of his calling throws no such difficulty in the way of an individual obtaining a place as teacher, and consequently should all other trades fail, should any unfortunate wight find his cash ebbing apace, he extricates himself at the expence of the mental welfare of some luckless pupils, who are thus abandoned to the tender mercies of one, who is a spurious candidate for the delightful task of teaching the young idea how to shoot.

This is a state of things that should not, must not, cannot remain: it is therefore the duty, as it should be the delight, of every one to shoulder his axe, and lay it heartily and with right good will to the tree of corruption, and never to desist from his hallowed task, till it is hewn down and cast into the fire. Let not any one, well-meaning it may be, but timid withal, "hint a fault and hesitate dislike," but let every one step boldly forward as a member of society, as a human being, standing forth for the rights of his fellow-creatures, and however weak and imperfect his means, let him not fear the result:

> "Thrice is he armed who hath his quarrel just."

There is a general movement throughout society, betokening an entire revolution in the educational, and consequently in the social system, not only in Britain but throughout the world, from closely peopled Europe to the rising states of Australia, and those who

remain listless spectators will be accountable for their buried talent. Labourers are gathering into the field from all quarters, and to their exertions will be due the accelerated appearance of the day when knowledge shall cover the earth as the waters cover the sea. In this arduous yet pleasing duty, the periodicals have an enlarged and powerful influence; and the numbers which now press in on every side show not less the zeal of the shepherds than the willingness of the sheep. "Feed my lambs," and nobly has the call been responded to. In this department no periodical maintains a higher situation than the *Analyst*, of which the last number contains an educational paper that should be read and inwardly digested by every one. I am sure the excellence of the matter of this periodical will vindicate me from the charge of partiality, to which I might otherwise be thought liable from my relationship to one of the editors. Let the people but show their desire, and they will not be without leaders worthy the cause.

Having seen the necessity of Phrenology as an instrument in the cause of education; it is natural now to inquire in what way it may yield the greatest degree of advantage to its possessor. The first object of the parent is to find those capable of instructing his children, and here, at the very threshold, the mental science will render him most effectual service. Observation has enabled the phrenologist to predict the capability of a candidate for the office of teaching, from an inspection of his head, with a certainty, previously unattainable, even after having given the said candidate a long trial. We shall now inquire into what the principal of the educational organs are: the first is philoprogenitiveness: Mr. Combe remarks as follows on this organ:—"The natural language of the faculty is soft, tender, and endearing. *It is essential to a successful teacher of children.* Individuals in whom the organ is deficient, have little sympathy with the feelings of the youthful mind, and their tones and manner of communicating instruction repel, instead of engaging, the affections of the scholar. This is the cause why some persons, whose manner, in intercourse with their equals, is unexceptionable, are nevertheless greatly disliked as teachers; and children are generally in the right in their antipathies, although their parents and guardians, judging by their own feelings, imagine them actuated altogether by caprice."—*Syst. Phren.* p. 162.

Every one who has had the slightest experience on the subject must feel how exquisitely true to nature is the foregoing description:—"their tones and manner of instruction repel, instead of engaging, the affections of the scholar." And yet the parent or guardian sees nothing of this, and the poor pupil is obliged to toil wearily on, like the panting hart on the parched desert, with not even a patch of green to refresh the aching sight. How thankful then should the parent be that he has it now in his power to save his offspring this unutterable misery! Well may we exclaim with the fair poet, Miss Landon—

> "How much they suffer from our faults,
> How much from our mistakes;
> How often, too, mistaken zeal,
> A pupil's misery makes."

Mr. Combe expresses himself as follows concerning the other educational qualifications: — "*Individuality, eventuality, and concentrativeness, are indispensable qualities to a good teacher. I have never seen a person capable of interesting children and exciting their intellects, who was deficient in both the first and second.*" The manner of a teacher, thus deficient, in communicating knowledge, is vague, abstract, and dry, and altogether unsuited to their mental condition. These three organs large, combined with large philoprogenitiveness, benevolence, and conscientiousness, and an active temperament, constitute the leading elements of a good teacher."

A science, which can yield such practical and valuable results as these, is truly worthy of our deepest study and warmest support. Here is at once revealed that which would have saved an incalculable loss of time, money, and temper,—which would have saved many a parent a broken heart, many a child a ruined reputation, and many a teacher an awful load of responsibility on the stricken conscience. How true is the exclamation of that excellent writer, Mr. Toulmin Smith:—"Without Phrenology the attempt at education must ever be totally futile and unsuccessful, and its pretence nothing more than a bitter satire upon human ignorance, folly, and presumption." As well might you attempt to build a house without implements, or cook your dinner without fire, as to educate without a knowledge, aye, and a thorough knowledge, of Phrenology,—and much better too; for, in the former case, you will forego your bodily comforts, in the latter your mental salvation. And yet there are actually, at this very moment, thousands of teachers, who, notwithstanding every facility, are unacquainted with the very names and locality of the organs! O, blind generation, how long will you shut your eyes on the sun, and continue to grope your way with a lantern!

C. T. WOOD, Jun.

Campsall Hall,
April 6th, 1837.

LETTER TO SIR BENJAMIN BRODIE, BY DR. HARRISON.

Our attention has lately been directed to a department of the healing art, which has, under the enlightened guidance of Dr. Harrison, assumed a character of such improvement that we feel it to be our duty to refer shortly to some particulars respecting it. Dr. Harrison has turned his attention for many years to Spinal Complaints; complaints, which, as they affect that bony column containing the *spinal cord*, the nervous pillar from which and with which all the nerves supplying the intestines, the lungs, the arms, and the legs, and all the viscera either arise or are connected, must be attended with great inconveniences to the individual, and great injury to the constitution.

As such results have been produced, and as the children of the

rich are principally those who suffer therefrom, (the poor however share,) it is natural to presume that medical men would attempt various methods to remedy these inconveniences, and to obviate these injuries. Among the methods, *gymnastic exercises; issues*, inserted on each side of the spine; *setons; frictions* in a particular direction, have been tried, but without *permanent* success.

Dr. Harrison having seen this want of success, and having considered that the bones of the spinal column were displaced, and, by this displacement, affected the nerves passing out from that spinal column, conceived, that the simple plan must be the *affording perfect rest to the spinal column*, by taking off the *pressure of the weight of the body* when in an *erect* position. With this object in view, Dr. Harrison causes all his patients to lie *perfectly horizontal*, and never to move from that horizontal position, even for the performance of the common functions of life. At the same time Dr. Harrison makes use of *mechanical means*, by which nature is aided in bringing back the bones to their natural site.

The success attendant upon this mode of treatment, modified according to circumstances, has been very great; and, in a letter advertised in our columns, addressed to Sir Benjamin Brodie, some very interesting cases of cure are recorded, and *plates* are given, illustrative of the *deformed* shapes of the individuals when first placed under Dr. Harrison's treatment, and also of the *improved* shapes after the cure was completed.

It is a curious fact, moreover, but for which we have the testimony of a respectable physician, that *the health of the patients improves in this horizontal position.* This fact affords a sufficient evidence that the affection of the spinal column, acting injuriously on the nerves passing out from it, is the cause of the sufferings that the deformed endure: for here, before the cure is complete, the perpendicular pressure being taken off, the nerves are partially delivered from their unnatural state, and relief is obtained.

The secretions are generally more free,—the bowels act better,—the appetite improves,—the complexion becomes healthy,—and sleep is obtained.

Dr. Harrison has further established a most important truth, namely, that *the shortening of a limb*, so far from being, as is generally supposed, the effect of *hip-joint* disease, is the effect of the curvature of the spine, which curvature draws up one hip, and consequently makes the leg therewith connected to appear shorter than the other leg. Many cases of shortening the leg, which have been treated by others as the effects of diseased hip-joint, Dr. Harrison has treated with success; for, *curing the curvature of the spine, the leg has assumed its proper length.*

For particulars, however, in reference to this and many other interesting matters, we beg to refer to the letter of Dr. Harrison to Sir B. Brodie: a letter, containing an abundance of those, called by Byron, stubborn things, namely, FACTS.

ON THE ADVANCE OF DEMOCRACY.

History has hitherto been the record of the subtlety and the wickedness of priestcraft, and of the violence and the tyranny of monarchism and aristocracy. The people have had no voice in the questions of peace and war, although their destruction, and the useless destruction of wealth, all of which they would have to reproduce, were the necessary consequence of the violence and the wickedness of their rulers. It is no injustice, therefore, to charge the wholesale destruction, constituting the chief material of the records of history, against the two classes,—that is, princes and aristocrats, who have hitherto held the wires of human agency, and have pulled them for no other purpose than violence, bloodshed, and human destruction.

History has been defined as "philosophy teaching by examples," but the examples have been from the privileged castes, and have been of violence and of war triumphing over humility and peace; the destructive and malevolent faculties prevailing over the preservative and benevolent affections; the destroying over the producing classes; and the heroes have been either of the princely and aristocratic classes, or bred by them, and reared in their soils and institutions.

The power of the sword and open violence changed with the days of gross barbarism into the power of making partial laws; the mailed brutes, ycleped barons, became "noble" legislators; and the spirit of violence upon, and robbery of, their serfs by the barons, had to be worked out by "noble lords" upon the descendants of those serfs by the multitudinous impositions of the statute book.

The history of legislation in England would exhibit a most edifying warning to any republic of the misery consequent upon aristocratic rule, and admonish the citizens of such republic to cherish their form of government. In much legislation there is much evil, and the commercial, trading, and poorer classes, have always the largest share of this infliction; for it is an infliction. Laws are restraints; and, for one restraint that involves good consequences, ten are absolute and positive restrictions upon liberty, or exactions from the pocket. In both instances they are disproportionately burthensome and weighty upon the poor. Laws at all times fall with the greatest weight upon the poor and the weak.

This is especially the tendency of legislation in a heavily taxed country, but it is a consolation, that the tendency of events is to advance the species, and to work out arrangements by which the poor and productive classes will be greatly and permanently benefitted: arrangements, in which man, as man, will be more equally regarded. At present, the right of might intercepts the rights of the many, though not to the extent which it has done in times past.

As society advances in political knowledge it will increase in the knowledge of economical science,—the one is the parent of the

other. Political science is that knowledge, which teaches men how to secure, when living together, their lives, liberty, and property, with the least cost of individual liberty; and political economy teaches how to produce and distribute wealth, and how the greatest enjoyment of that wealth is most effectually realized to man.

In reasoning upon this subject, it should be remembered that all wealth is the gift of God to man: for the elements were given by God to man; and all things produced are but the elements combined by the labour of man.

The power to labour and combine those elements, as well as the elements themselves, were the free gift of God to man, AS MAN. We know that man has laboured abundantly;....the enormous debts and waste of governments in all countries, and the excessive fortunes and accumulations, possessed by large landed proprietors and capitalists, are abundant evidence of this; when, therefore, we read the heart-rending accounts of the destitution and starvation which the state of Ireland and the Highlands of Scotland, and our own manufacturing and rural population, are constantly presenting, we should remember that the cause is not in the idleness of the people, but in the ignorance and the cupidity of their governments. It is in the ignorance of the men, who have monopolized and who still unduly influence the legislative power, of the kindred sciences of politics and political economy, and of the laws flowing from the principles upon which those sciences are based, that we must trace in the greatest degree the cause of the misery. The remedy is to be sought in the knowledge and the diffusion of these sciences, and the performance of the duties deducible from that knowledge. We do not deny that selfishness and cupidity are mixed up in the human motives, which operate in the application or the rejection of principles and laws, based on these sciences, so far as they are known; but we contend that those motives are themselves effects, and the cause is ignorance of politics or the science of government, and of the principles, laws, and results of political economy, that is, of the *science of the agency of man in diffusing the blessings of God.*

Human nature is, as a whole, good. It is the product of an infinitely wise and good God; and the intellectual powers of man, upon the whole, govern and direct his physical powers by the shortest and readiest means to the attainment of his individual ends; and the combined efforts of men are influenced in the same way, but necessarily advance less rapidly, because they must wait until the general knowledge is sufficiently extended to unite them in one common opinion, that being the essential of united action. This united conviction must exist for some time, until it becomes sufficiently rooted to resist those fallacies which the uninformed or unconvinced urge against it, and by which it is tried, strengthened, and spread; and until, instead of a first impression, liable to be blown about by every wind of doctrine, it becomes a stable conviction throwing off the fallacies of the sophists, and dispersing the fog of error in which it had been previously enveloped.

The science of *production* is far in advance of the science of

distribution. More is now produced than is needful to give every human being not only necessaries, but the comforts, nay, many of the luxuries of life; and if the arrangements of society were determined by the collective sense of society, through the medium of a just and equal distribution of the elective franchise, those arrangements would dismiss into society a further large mass of human power, which is now either withdrawn from productive usefulness, or else organized in the army and navy for destructiveness. In society, the same men must cultivate the arts of peace and usefulness, and contribute to sustain, instead of idly consuming, the products of those who labour.

The new Poor Law Act is an experiment upon the endurance of the mass of the people, and, *until the corn laws are repealed, is an act of injustice;* but although it entails much suffering upon them, will contribute largely to work out a system, which shall produce equal laws, and equal eligibility to legislative power.

Dr. Franklin's story of the possession of a jackass having qualified a man, and the death of the donkey having destroyed the elector, is a true illustration of the elective qualification in England. It is bricks against men. The question is not the competency of the man, but his possession of bricks. True it is, that the man may be a good and sensible citizen, but however good his head and his heart may be, if he does not possess the requisite number of bricks, he is not permitted to say whom he would choose to rule and regulate his actions. And though his neighbours, and those to whom he is well known, may think so highly of him, as to wish him to represent and act for them, they are not permitted to choose him, because he does not possess the requisite number of acres. Bricks without a head will do, but a head without bricks will not. True it may be, that without that interest and weight which property carries with it, he has, by the superiority of his talents and character, obtained a greater influence and a higher character than others with property: but the wisdom, or rather subtle selfishness of the privileged hereditary legislators, by whom and their nominees, our laws have been made hitherto, has interposed and said, that intellectual and moral fitness, though possessing the confidence of the electors, shall not, without the bias which a landed qualification gives in favour of the landed aristocracy, be allowed to convey its knowledge and influence into the laws and institutions of Britain.

True it is that all men have their lives and liberties at stake; true it is that these and the power to labour, are the possessions which are the gifts of God to each, and are admitted by all to be the most important of the blessings of this stage of our being.

True it is that these gifts and blessings are all necessarily and immediately, or mediately, affected by every law which is enacted.

True it is that the non-possession of property renders the protection of equal laws more important to the poor; yet the cupidity and ignorant fears of the law makers, the descendants and tools

of the barons, have induced them to enact, that without bricks a man shall have no vote; which is, in effect, to say to the poor man, that because he is poor and needs protection, he shall be at the mercy of others, and shall not be allowed to protect himself. The poorer he is, says reason, the more important to him are those rights and things he does possess; therefore, say our law makers, such as Lord Dalmeny, (who signalized himself by a lot of slender namby-pamby upon the question of the ballot,) therefore, he shall not have the right to protect himself.

It is the disposition to monopolize that raises one great barrier to the diffusion of the blessings of God; a disposition, fostered by the continuance of an aristocracy; a disposition, which becomes ravenous in proportion as it is fed, and is rooted in the aristocracy of Great Britain. The most injurious monopoly is the monopoly of legislation, and it must be thrown open ere society will enjoy equal rights and equal laws.

The monopoly of legislation has kept back, in an almost inconceivable degree, the prosperity of the country, and the intellectual progress of the people. The aristocracy, who have monopolized the power to make laws, were ignorant of social policy, and innocent of any desire to extend knowledge. We speak of them as a class.

That there were enlightened and good men amongst them, must be admitted; but they were few and far between, and were so bound round by the iron hand of hereditary legislators, with titles, places, and influence, that they could only shed a passing light.

Time and the press, aided by the tendency which God has impressed upon all truths to increase and unite, as streams unite and form the ocean, have aggregated, strengthened, and then spread their light, and have made the mass to feel and perceive the strength flowing from peaceful union in moral efforts; and that to point out the ignorance and the errors of the dominant few, is to sap their power and strengthen the people.

Following out this benevolent tendency of truth to a common centre, God has so constituted man that his tendency, upon the whole, is to truth and right feeling: for notwithstanding that each has his bias in those things to which his individual interests, or those interests which he thinks to be his, are concerned, yet as each has a different bias in particulars, and all are rightly inclined in the main, the general tendency to the right path largely outweighs the particular tendencies to the oblique, and knowledge and wisdom, truth and happiness, still make progress, and virtue is reverenced. The strength of the obstruction given by particular classes, has varied in proportion to the power they have been able to bring in aid of their selfish interests. Still their selfish influence has been, and can only be for a time; for goodness and wisdom are the beginning and the end, and as rivers increase in power and majesty as they roll onwards and receive their tributary streams, so each discovery of science, and every new combination of known truths, bear humanity onwards to the end and purpose of God, *the happiness of his creatures.*

The two principal enemies to the progress of religious and

political truth will be found under the cowl and the diadem. Priestcraft and monarchism, spawned from the union of ignorance and fanaticism, and themselves engendering bigotry and persecution, spiritual depression and military oppression, the rack and the sword, the inquisition and the gibbet, incorporated selfishness in ecclesiastical graspings, and in fiscal exactions. Error carries within itself the seeds of its own dissolution; and craft, ever prone to overact itself, is sure to fail in a combat with honesty; and thus the corruption of the Romish priesthood, grown bold by impunity, furnished the weapons by which that enormous incubus was at length thrown off by a great portion of Christendom, and its pressure essentially relieved from all; and the folly of Charles, the bigotry of James, the obstinacy of George III. as regarded America, and the corruption and the cruelty of the monarchy and aristocracy in France, presented examples which have tended to make the people wise unto political salvation, and to perfect them through suffering. On such occasions, seed was sown, much of which fell into good ground; men have heard the words "the greatest happiness" and understand them, and those words are fructifying in minds that will bring forth fruit, some an hundred-fold, some sixty, and some thirty.

The science of legislation is very imperfectly understood by the majority of our "Corinthian pillars," but is much better understood than practised. Since the days when might made right, when the club, and then the sword, were the arbiters of property, those who have had property, and have, therefore, possessed influence, have sought by subtlety to retain those inequalities which could no longer be supported by open violence. Hence with the forms of freedom, modes of withholding the substance of freedom were brought into being, and cunning and corruption were made to accomplish what feudal violence dare not, or could no longer extort. As the semblances of law were essential, it became necessary that the acting of those semblances should be retained in the hands of the monopolists and their dependants, and that the using of these forms should work out as little of the substance of usefulness as possible. To this we owed, and still owe, the provisions for shutting out those who have not a landed estate of £600. or £300. per annum from disability to sit in parliament. To this we owed, prior to the reform bill, the provisions for shutting out all except freeholders; and to the necessity these monopolist legislators found themselves under of protecting themselves and their estates, both against the consequences of the wasteful extravagances into which they had plunged their country, and against the increasing intelligence Caxton's leaden pioneers had opened to the people, we owe the excessive and multitudinous laws, which now encumber the statute book and oppress the people. To this we owe the continuance of the power, by which the aristocracy are enabled to continue piled upon our shoulders, as a NATION, the priests of a *sect*, and to take a tenth of the property of that nation, for the privileged few of that sect. To this we owe the multitudinous excise laws, which, with the customs, extract without any valuable return three-fourths of

the whole expenditure of the country from the working and industrious classes; and by their enormously heavy and unjust, because disproportionate fines, imprisonments, and transportations for offences, not in most cases immoral, fill the jails, demoralize numbers of the people, create heavy town and county rates, and national taxation to maintain them in those jails. They thus create the sinners and burthen the obedient to maintain them. To this spirit of monopoly we owe the wicked GAME LAWS, by which thousands of men are yearly destroyed by imprisonment and transportation, and to this we owe the deliberate murder by society of unresisting sinners, by way of teaching its members not to commit murder under the influence of malevolence or fear. To this we owe the barbarous enactments against those who have spoken of justice and dethronement, for enthroned despots and their ministers.

Wherever aristocracy, or the aristocratic principle, prevails, may be traced great and gross irregularity of right, and consequently of conditions. Aristocracy is *but another name for inequality*, as inequality is but another term for injustice. The aristocratic spirit, in Great Britain, extends itself directly and immediately into the laws of the country, and into the executive in all its grades; it casts its baneful shade over the political character of the whole community, and every effort for the many has not only to struggle against the natural difficulties of progression, which, being the difficulties of the Supreme, are but the discipline by which we are led to the knowledge of and are fitted to enjoy improvements, but against the influence of the concentrated selfishness of worldly retainers against the general good, who thus deaden the social principle, and make the selfish principle doubly active.

If we examine the working of the aristocratic principle in England, it will be found that when the lords and their nominees have had the most to do, or the greatest influence, then men and the interests of men, which are identified with peace and commerce, have most dwindled.

The disease of law-making is a disease of restriction, but when the legislative mind, which is the root itself, is diseased, the trunk will decay, the canker will spread through the whole system, and the branches and leaves are the first to wither. The lords, and their *first cousins*, THE CLERGY, and their joint nominees, the borough-members, obtained an over-laying influence in most cities and corporate towns, and the necessity for maintaining a monopoly in legislation induced them to corrupt the constituency and to create badged slaves, under the name of freemen, through whom as instruments, they penned up, and fleeced at pleasure, the whole flock. The illustration of the upas influence of the aristocratic spirit, may be seen and traced in the stationary position of old cities which enjoyed (?) the felicity of a bishop's see and corporation privileges, and the rapid progress of unincorporated towns. Contrast Chester with Manchester, and Warwick with Birmingham, and then transfer the contemplation to America, and view the many important towns which have rapidly risen, and the rapid and extensive development of human resources producing enjoyment and

happiness to the many, the moment she emancipated herself from the monarchy and from aristocracy. In the sluggish life of the old cities we see respiration under an incubus; and in the onward rapidity of the American States, the rapid progress of a nation in which the lungs of society have free respiration. Having cast off aristocracy and a state church, democracy, though not wholly free, but free from those depressions, has produced wealth and enjoyment to the many to an extent unknown in countries under aristocratic domination. The superiority of the democratic principle is not fully shown even in the United States, for though the North Americans have freed themselves from the *aristocracy of* RANK, they have continued the *aristocracy of* SKIN. This is the plague spot of the union,—it is the besetting sin of that people, and will yet find them out.

True it is that slavery, being established when monarchy was in the ascendant, is a legacy of the old country; its excuse but not its justification; but if, with this great drawback, democracy has done so much for the people; if, with the root of equality thus leavened, it has equalized the condition of its people so extensively in half a century, how vast are the hopes we are justified in entertaining, when, with the knowledge and the science of the people of Great Britain, and the deep conviction of the value of the democratic principle, which the struggle that must yet be had for its establishment will produce, we shall see it established amongst us, unalloyed with this serious drawback.

SOCIETY, in twenty years of peace, has advanced a hundred years in knowledge; not so, our LEGISLATORS and RULERS. They are far behind the spirit of the age, the comprehension of the people, and the wants of society. Our legislators and rulers are from the privileged order; are men of a caste: the caste itself privileged; and this keeping them within the narrow circle of the privileged few, their opinions are narrowed, and their affections restrained from flowing into universality. This narrowness of those, who ought to be leading mankind onwards, is infinitely pernicious at this time in England. The increase of knowledge is rapidly leading the mass to insist upon an equality of rights, and has taught them the important distinction between an *equality of* RIGHTS, and an *equality of* PROPERTY. This has made them peaceable, and therefore strong.

They see, that, although they ought to possess equal rights, that property must and will, and ought to be proportioned to industry; and they have entered upon the second stage of the progress to the attainment of those rights. They are now learning the art of producing a common conviction, and of seeking the right end by the right means. Contrast the sentiments delivered at the recent meetings of the working classes, at the Crown and Anchor Tavern, in the Strand, with those for which Muir, Skirving, Palmer, Gerrald, and Margarot, were transported in 1793—4, and for which hundreds were imprisoned in England, until the aristocracy and their nominees, the boroughmongers, were disappointed by honest juries of their intended hanging, ripping, and mangling of Horne Tooke, Hardy, and Thelwall—a punishment enacted and acted by

the "Corinthian pillars of polished society." Mr. Muir was indicted "for belonging to two societies for reform; for represent-"ing at those societies, the government of this country as op-"pressive and tyrannical, and the legislative body of the state as "venal and corrupt; for instituting a comparison between the "pretended existing government of France, and the constitution "of Great Britain, with respect to the expences necessary to carry "on the functions of government; for endeavouring to vilify the "monarchical part of the constitution, and to represent it as useless, "cumbersome, and expensive; at least, Thomas Muir did use "words and arguments of the above seditious tendency and import." "Further, the said Thomas Muir did wickedly and feloniously "advise several persons to peruse a number of seditious pamphlets "and writings, particularly 'Paine's Rights of Man,' and the "writing entitled 'A Declaration of Rights, and an Address to the "People, approved of by a number of friends of reform in Paisley;' "also a paper entitled 'A Dialogue between the Governors and "the Governed.'"

This was the head and front of his offending, and for this he was transported, and that transportation ended in his death. Yet the people *have* read Paine's works, and at a recent meeting of the working classes, the following language is reported to have been held: "Democracy or despotism?" "That worn-out institution, royalty." "Superiority of American riflemen to stiff and stately red machines." "A lunatic king." "An army of principles penetrating where an army of soldiers cannot." "Setting the mother country at defiance." "Peculating and official tyrants." "Drunken, unqualified, irresponsible judges." "Triumphs of justice over injustice—of liberty over despotism." "Rebellion of the king against the people." "A king dying a traitor's death." Such is the language and such are the images which the Canada coercion project has brought forth in the metropolis from the working classes. The army of principles has spread in spite of the red machines, and the same government who hear this and wince, who had recently seized a few ignorant countrymen for belonging to a secret society, have felt compelled to pardon them; thus proving that society has gone a-head, and that government can only be great over ignorance and weakness.

In 1794, there were men of high rank, station, talent, and influence, associated together, organized and disciplined for months previously; and, yet, the moment that toryism frowned, the aristocrats deserted. Hardy, a poor shoe-maker, simple-minded and humble, but firm; Thelwall, a lecturer and teacher of elocution, honest, ardent, talented, and zealous; and Horne Tooke, a man with learning, wit, and fearlessness, whom it was desirable to criminalize, that his energy and mental powers might not be exerted in organizing the defence of his friends, were brought out to go through the same form to the scaffold that Muir and his friends had been passed through to banishment. Let it be remembered too, that such was the determination of the "Corinthian pillars" of that day, that those with others, making

twelve men, were penned up *for slaughter*, according to the Corinthian acts of parliament, whilst hundreds were immured in other pens, intended to be sent to a lingering death in exile, and, that not a single Whig lord, or aristocrat, was included by the Tory aristocrats, then in power, in the proceedings; although the then Duke of Richmond, and others, had been associated with these bodies, and had led them on to agitate for reform. Whereas, in 1837, we have the working classes sensible of their own strength, repudiating the destructive patronage of the aristocracy, and boldly avowing their determination to act for themselves, not by violence, but by reasoning; reviewing the past with reference to the present, and giving expression, in an orderly and consecutive course of reasoning, to their hopes for the future.

When the aristocracy, the parsons, and the squierarchy, could induce the people to violent outbreaks, and then imprison, and hang them, "according to law," they could subdue them, but the ignorance which led to this has been removed in the towns, and though the clergy have preserved the rural population in suffering ignorance, rail-roads and commerce will instruct them, and in another twenty years of peace, the additional strength, which will thus be gained to the democratic principle, will enable the many to rise up "as a strong man refreshed," and they will then wonder that they have borne so long the great image of iron and clay, which, when they stand erect, they will find broken at their feet.

(To be continued.)

A PHRENOLOGICAL ANALYSIS OF THE HISTORY OF A BOY, BORN BLIND AND DEAF,

UNDER THE TREATMENT OF J. WARDROP, Esq., F. R. S., *Surgeon*,

By JOHN EPPS, M. D., *and read before the Anthropological Society, March* 16, 1837.

THE case to which the attention of the Society is about to be drawn is one, which has connected with it much interest, if not of a strictly phrenological character, at least of a character, which may tend to aid the phrenologist in arriving at a satisfactory conclusion respecting the functions of the senses, viewed in comparison with the functions of the perceptive powers.

The boy in question was brought under Mr. Wardrop's attention, at 14 years of age.

Soon after his birth his parents observed in both eyes a cataract, i. e. an opake condition of the crystalline lens, a body, situated in the central chamber of the eye, which in general is beautifully transparent. They observed, also, at a very early age, that he was deaf, as no sounds appeared to excite his attention, and no noise seemed to awake him when he was asleep.

In order that no erroneous conclusions may be drawn, it may be well to describe the condition of the eyes as given by Mr. Wardrop.

"In the right eye the cataract was of a white colour and pearly lustre, and appeared to pervade the whole of the crystalline lens. The pupil, however, readily dilated or contracted, according to the different degrees of light to which it was exposed. The cataract in the left eye was not equally opake; about one-third of it being dim and clouded, arising, as it appeared, from very thin dusky webs, crossing it in various directions, the rest being of an opake white colour."

"I could discover no defect in the organization of his ears."

Such was the state of the boy when he came under Mr. Wardrop's care. In addition, he had the usual appearances of strength and good health: his countenance was pleasing and intelligent.

Though born with these defects in reference to the organ of vision, and though deficient in regard to the sense of hearing, he began, when at the age of attempting to walk, to be attracted by bright and dazzling colours, and evidently to be pleased by striking his teeth with sonorous bodies, thus manifesting a degree of activity of those very senses in which a defectiveness existed: a fact, evidently demonstrating that the retina, the nerve of sight, and the auditory, the nerve of hearing, were not entirely insensible to the impression of light and sound.

As evidence of the gratifications, derived from these senses, "he used to hold between his eye and luminous objects such bodies as he had found to increase the quantity of light; and it was one of his chief amusements to concentrate the sun's rays, by means of pieces of glass, and transparent pebbles, or similar substances, which he held between his eye and the light, and turned in various directions. He would go to any out-house or room within his reach, shut the windows and doors, and remain there for a considerable time, with his eyes fixed on some small hole or chink, which admitted the sun's rays, eagerly catching them. He would also, during the winter nights, frequently retire to a corner of a dark room, and kindle a light for his amusement. Such, indeed, seemed to be the degree of pleasure which he received from feasting his eyes with light, that he would often occupy himself in this manner for several hours without interruption. In this as well as in the gratification of the other senses, his countenance and gestures displaying a most interesting avidity and curiosity."

As evidences of the pleasure he derived from *sound*, it was observed that in his childhood, one of the most remarkable circumstances relating to him was this eager desire to strike any hard substance against his teeth. He was particularly gratified when it was a key, or any instrument that produced a sharp sound; and he struck it always upon his front teeth. When a ring of keys was given him, he seized them with great avidity, and tried each separately by suspending it loosely between two of his fingers, so as to allow it to vibrate freely; and after tingling them amongst his teeth, in this manner, he generally selected one from the others, the sound of which seemed to please him most. This indeed was

one of his favourite amusements, and it was surprising how long it would arrest his attention, and with what eagerness he would, on all occasions, renew it. A gentleman, observing this circumstance, brought to him a musical snuff-box, and placed it between his teeth. This seemed not only to excite his wonder, but to afford him exquisite delight; and his father and sister, who were present, remarked, that they had never seen him so much interested on any former occasion. Whilst the instrument continued to play, he kept it closely between his teeth, and even when the notes were ended, he continued to hold the box to his mouth, and to examine it minutely with his fingers, his lips, and the point of his tongue, expressing, by his gestures, and by his countenance, extreme curiosity.

Mr. Wardrop provided him with a common *musical key*. When it was first applied to his teeth, he exhibited expressions of fear mixed with surprise. However, he soon perceived that it was attended with no harm, so that he not only allowed it to be renewed, but soon acquired the habit of striking it on his own hand, so as to make it sound, and then touched his teeth with it. One day his father observed him place it upon the external ear. He has also, on some occasions, been observed to take notice of, and to appear uneasy with very loud sounds.

The teeth, therefore, became the channel of communicating sound to the auditory nerve. This boy seemed anxious to smell and feel the various bodies brought before him; and his sense of touch and smell had thereby a preternatural acuteness, and afforded a means for collecting that information which, under other circumstances, the sight would have gathered. Thus he was by the senses of touch and smell, in the habit of examining every thing within his reach. Large objects, such as the furniture of a room, he felt over with his fingers, whilst those which were more minute, and which excited more of his interest, he applied to his teeth, or touched with the point of his tongue. In exercising the sense of touch, it was interesting to notice the delicate and precise manner by which he applied the extremities of his fingers, and with what ease and flexibility, he would insinuate the point of his tongue into all the inequalities of the body under his examination. To the sense of smell, he seemed chiefly indebted for his knowledge of different persons. He appeared to know his relations and intimate friends, by smelling them very slightly, and he at once detected strangers. He appeared to be able to distinguish persons by means of smell, even when at a considerable distance. This was particularly striking when a person entered the room, as he seemed to be aware of this before he could derive the information from any sense than that of smell. In selecting his food he was always guided by his sense of smell, for he never took any thing into his mouth without previously smelling it attentively. When a person came into the room where he was, the moment he knew of his presence, he fearlessly went up to him, and touched him all over and smelled him with eagerness."

In regard to this mode of examination, the following particulars

are interesting :—" When a stranger approached him, he eagerly began to touch some part of his body, commonly taking hold of the arm, which he held near his nose, and after two or three strong inspirations through the nostrils, he appeared to form a decided opinion regarding him. If this was favourable, he showed a disposition to become more intimate, examined more minutely his dress, and expressed by his countenance, more or less satisfaction; but if it happened to be unfavourable, he suddenly went off to a distance, with expressions of carelessness or of disgust."

"The power of remembrance as connected with the smell was evidenced by the following fact, when he was first brought to my house to have his eyes examined; he both touched and smelled several parts of my body, and the following day, whenever he found me near him, he grasped my arm, then smelled me, and immediately recognized me; which he signified to his father by touching his eyelids with the fingers of both hands, and imitating the examination of his eyes, which I had formerly made."

After describing the particulars already detailed, Mr. Wardrop remarks, "But the imperfections which have been noticed in his organs of sight, and of hearing, were by no means accompanied with such defects in the *powers of his mind*, as might be suspected. He seemed to possess the faculties of the understanding in a considerable degree, and when we reflect that his channels of communication with the external world must have afforded very slow means of acquiring information, it is rather surprising how much knowledge he had obtained."

This astonishment the phrenologist does not recognize. It is not wonderful, however, that such astonishment should be experienced by others, because to the senses, until phrenology was known, almost every intellectual power, and almost every moral feeling, were referred; in fact, before Phrenology taught its exalted truths, the channels, through which those impressions, which, *when received by the organs of the brain*, became truths or facts, were considered as the originators of the facts or truths themselves, just in the same manner as the non-producing classes of society, because engaged in the distribution of wealth, are treated with as much respect as if they were the producers of that wealth.

A few examples may be brought forward.

That size can be judged of by the sense of touch, or rather that the impressions connected with the contact of the body with the nerves of touch, may be conveyed to the organ of size, so as to give an accurate notion of the dimensions of a body, is evidenced by the following incident. On one occasion, a pair of shoes were given to him, which he found too small, and his mother put them aside in a closet. Sometime afterwards, young Mitchell found means to get the key of the closet, opened the door, and taking out the shoes, put them on a young man, his attendant, whom they fitted exactly.

Mr. Wardrop remarks, "he seemed to select and show a preference to particular *forms*, *smells*, and other *qualities* of bodies. He has often been observed to break substances with his teeth, or

by other means, so as to give them a form which seemed to please him. He also preferred to touch those substances which were smooth, and which had a rounded form; and he has been known to employ many hours in selecting from the channel of a river, which was near his father's house, small stones of a rounded shape, nearly of the same weight, and having smooth surfaces. These, too, he would arrange in a circular form on the bank of the river, and place himself in the centre of the circle. He also seemed to be much pleased with some smells, and equally disgusted with others, and this latter he expressed by squeezing his nostrils, and turning his head from whence the smell came. He showed an equal nicety in the selection of his food.

The possession of the kindlier feelings, and the possession of reasoning, as founded upon the combined action of the knowledge of effects, and of the duty which the activity of the finer feelings makes known as such, is evidenced by several facts: one may be mentioned: "On another occasion, finding his sister's shoes very wet, he appeared uneasy until she changed them." Now this implies a knowledge of wetness, of the effect of wetness, and the dictate of the benevolent feeling as connected with a knowledge of these effects.

His feelings of affection seem to have been strong: "On one occasion, finding his mother unwell, he was observed to weep; and on another, when his attendant happened to have a sore foot, he went up to a 'garret room to find a particular stool for his foot to rest upon, which he himself had made use of on a similar occasion, long before. He seemed fond too of young children, and was often in the habit of taking them up in his arms."

The most extraordinary feature of his character, that is, viewed in connexion with his being blind and also deaf, is that he had a strong *love of finery*. "He early showed a great partiality to new clothes; and when the tailor used to come to make clothes at his father's house, (a practice common in that part of the country,) it seemed to afford him great pleasure to sit down beside him whilst he was at work, and he never left him until his own suit was finished. He expressed much disappointment and anger, when any of his brothers got new clothes, and none were given to him. Immediately before he came to London, each of his brothers got a new hat, his father considering his old one good enough for the sea voyage. Such, however, was his disappointment and rage, that he secretly went to one of the out-houses, and tore the old hat to pieces. Indeed his fondness for new clothes afforded a means of rewarding him when he merited approbation, and his parents knew no mode more severe of punishing him than by obliging him to wear old ones.

A few days after the operation was performed on his eyes, he was removed from his lodging to his uncle's house, who being a tailor, had a room full of various coloured clothes, which afforded young Mitchell an unceasing source of pleasure and amusement.

"He expressed a great desire for a suit of new clothes, and it was signified to him, that his wishes would be complied with; and being allowed to make a choice, he selected, from among the variety

of colours, a light yellow for his breeches, and a green colour for his coat and waistcoat. Accordingly, these were made; and as I solicited his father not to allow them to be put on until I was present, it was signified to him, that he should have permission to wear them in two days. The mode by which he received this communication was by closing his eye-lids, and bending down his head twice, thereby expressing he must have two sleeps. One day, after the clothes were finished, I called, and requested he should be dressed in them. This was intimated to him by his uncle touching his coat, and giving him a ring of keys, one of which opened the door of the room where the clothes were kept. He gladly grasped the keys, and in an instant pitched on the one he wanted, opened the door, and brought a bundle, containing his new suit, into the room where his father, uncle, sister, another gentleman, and myself, were sitting. With a joyful smile he loosened the bundle, and took out of the coat pocket a pair of new white stockings, a pair of yellow gloves, and a pair of new shoes. The succeeding scene was, perhaps, one of the most extraordinary displays of sensual gratification which can be well conceived. He began by first trying his new shoes after throwing away the old ones with great scorn, and then with a smiling countenance went to his father, and to his sister, holding up to each of them and to me his feet in succession, that we might admire his treasure."

"He next put on the yellow gloves, and in like manner showing them to his father and sister, they expressed their admiration by patting him on the head and shoulders. He afterwards sat down opposite to a window, stretched out on each knee an expanded hand, and seemed to contemplate the beauty of his gloves with a degree of gratification scarcely to be imagined. At one time I attempted to deceive him, by putting a yellow glove, very little soiled, in place of one of his new ones. But this he instantly detected *as a trick*, and smiled, throwing away the old glove and demanding his new one. This occupation lasted a considerable time, after which he and his sister retired to another room, where he was dressed completely in his new suit. The expression of his countenance, on returning into the room in his gaudy uniform, excited universal laughter, and every means were taken to flatter his vanity and increase his delight."

Mr. Wardrop had operated upon him, and, in so doing, broke down the *cataract*, not being able to extract it on account of the violent resistance. The phenomena, presented by him, after the operation, were very extraordinary: showing that the perception of distance is not dependent upon the education of the sense of *sight*, as many maintain, but is dependent upon the existence of certain organs in the brain. The facts are so striking that their quotation will be useful.

"On the fourth day after the operation, on making trial if he could distinguish any object, he readily discerned a book, placed on the coverlet of the bed, and in many of his attempts to touch it, seemed to judge pretty accurately of its distance. His *eye* could not have learned as yet the habit of judging of distance.

"On the fifth day he got out of bed, and was brought into a room having an equal and moderate light. Before either touching or seeming to smell me, he recognized me, which he expressed by the fear of something to be done to his eyes. He went about the room readily, and the appearance of his countenance was much altered, having acquired that look which indicated the enjoyment of vision. *Indeed, before the operation, he always walked with much freedom; and I observed, even on a very rugged and unequal road, he did not stumble or suffer in the least from jolting.*" Here is the operation of the organ of weight.

"He appeared well acquainted with the furniture of the room, having lived in it several days previous the operation; and though, from placing things before him, he evidently distinguished and attempted to touch them, judging of their distances with tolerable accuracy, yet he seemed to trust *little to the information given by the eye*, and always turned away his head, while he carefully examined by his sense of touch, the whole surfaces of the bodies presented to him.

"On the sixth day he appeared stronger, amused himself a good deal with looking out of window, and seemed to observe the carts and carriages which were passing in the street. On putting a shilling on the middle of a table, he INSTANTLY *touched it.*

"On the seventh day the inflammation was nearly gone, and he observed a piece of paper of the size of half a sixpence put upon the table."

His secretiveness must have been large; but his intellect must have been active in its manifestations. "He took great pleasure in locking people up in a room or closet, and would sometimes conceal things about his person or otherwise, which he knew not to be his own property: and, when detected doing so, laughed heartily."

Such is the case of this boy; a case, which I think the Society will deem worthy of their attention: being pregnant with instruction, and opening up views to the phrenologist, truly pleasing and beneficial; these views, each individual of the Society will, it is most likely, desire to follow out by himself; it is due, however, to Mr. Wardrop, to notice the fact, that he was fully aware of the importance of this case, as the following remarks by him sufficiently testify.

"The picture which I have attempted to delineate of this boy's lamentable situation, whilst it must excite our sympathy, cannot fail at the same time to give rise to much philosophical speculation, in one of the most interesting subjects which can engage the human understanding. It is a most wonderful and instructive experiment, instituted by nature herself, to illustrate the progress of human intellect, to mark the influence of the different organs of perception in the development of its various faculties: thereby realizing what many philosophers have contemplated in imagination, but never before witnessed."

To render still more clear the influence of these facts upon

Phrenology, the attention of the Society may be beneficially called to the case of a lady, who *lost* her sight and hearing, which contains some facts, placing the subject in another position.

(To be continued in the next Number of the Magazine)

FINSBURY DISCUSSION SOCIETY, Wednesday, 15th of February, 1837.

Mr. Loosely's Speech continued from page 252.

I willingly admit that the lists of female genius would not be so scantily filled up as they now are, had woman, during the last century, enjoyed the advantages of a sound and liberal education; but, we cannot allow that the want of this sufficiently accounts for the great disparity existing between the number of males and females, who have displayed great mental powers, simply because it is not to education alone we are indebted for so many of the former; for, reading the biographical memoirs of those men who have risen to the greatest eminence in the literary and scientific world, we shall find that a vast proportion of them have forced their way to distinction in spite of the defects of education; whilst a perusal of female biography will convince every unprejudiced mind, that but very few, if any, of the softer sex, have attained to an honourable niche in the temple of intellectual fame, except by the aid of a superior education. Surely then, it cannot be said that the intellectual superiority, hitherto evinced by man, is solely attributable to his education; no, Sir, the fact just referred to, proves that the paucity of celebrated females must have arisen from some other cause; and that cause, in my opinion, is the difference in their mental powers. But, Sir, another reason why I cannot admit the want of education to be the sole cause of the difference in mental power exhibited in every age between the sexes, is founded on the fact, that hundreds and thousands of the female sex have been educated, and well educated too, from amongst whom poets and painters have arisen who have reflected honour on the age in which they lived, and illumined the name of woman with a splendid radiance; still none of them have equalled in poetry the strength and majesty of the Grecian bard, the elegance of the Latin poet, the sublime conceptions of our own immortal Milton, the incomparable productions of the child of nature and the prince of dramatists, Shakspeare, or the various excellencies of many others whose names must be familiar; nor rivalled in painting a Rubens, a Titian, a Michael Angelo, a Raphael, and other ancient and modern masters, whose works have immortalized their art; or in science, a Bacon, a Newton, a Locke, a Franklin, or a Herschel; but their productions have invariably partaken more of a beautiful and soul-subduing than of a sublime and spirit-stirring character; thus evidently proving, that the mental powers of woman are not equally vigorous and energetic with those possessed by man. I shall conclude this part of my

address, Mr. Chairman, by referring to the testimony of the scriptures on this subject, for the purpose of showing that so far from the pages of holy writ containing nothing (as we were told by a former speaker) which indicates the inferiority of woman, they do contain much which bears out that view. I do not know, Sir, that the scriptures contain a minute metaphysical or phrenological analysis of the powers of the human mind, but I am certain they contain sufficient general evidence on the subject to overthrow my opponents' argument, for all through the scriptures the subjection of woman is clearly pointed out. It is so in the beginning, for there it is expressly declared by God himself, "that the desire of the woman should be unto her husband," and "that he should rule over her," a declaration which, in my opinion, goes a great way towards settling the question at issue, since I cannot conceive that the all-wise being would have ordained man to rule, unless he had endowed him with mental superiority. It is so in a variety of other places both in the Old and New Testament; but to avoid wearying you, I will content myself by referring to the writings of Paul, who in one passage says, that "Man is the image and glory of God, but that the woman is the glory of the man;" and, in a number of others, enforces the injunction, "Wives submit yourselves unto your own husbands as unto the Lord;" an injunction, which, in the opinion of some of our most learned commentators, sufficiently proves that the apostle viewed man as a being endowed with superior mental powers to those possessed by woman. Having thus shown that my views on this subject are in accordance with the dictates of reason and the testimony of holy writ, I might now conclude, but as the question on the board refers to the female mind as a whole, I cannot, in justice to the more lovely portion of creation, sit down without giving it as my decided conviction, that whilst in some respects woman is the inferior of man, in all the more soft and gentle feelings of our nature she is far, very far, his superior. Who that has seen the anxious care and unwearied solicitude with which a mother watches over her tender offspring, counting no sacrifice on her part too great, so long as it adds to their happiness, and even depriving herself of "tired nature's sweet restorer, balmy sleep," to administer to their wants; or has beheld her in the dwellings of poverty, sharing the whole produce of her scanty cupboard amongst her children, regardless of the cravings of her own hunger, and viewing them partake of it with an eye of satisfaction—which shows that she feels more pleasure in depriving herself of her portion to increase theirs, than she would in partaking of the richest luxuries—will deny that in these respects none but woman could do as woman does. Who that has read of the conduct of woman in the hour of her husband's peril, of the readiness with which she has risked her own safety to secure his; of the pleasure with which she has braved the most imminent danger, and even hazarded her own life, to preserve that life she holds as still dearer than her own; or has witnessed the heroic fortitude she displays under the reverses of fortune, the kindness and affection with which, regardless of the loss of her own enjoyments, she seeks to alleviate and soften the distress

of her partner; and though her own heart is inwardly the prey of the most poignant anguish, veils her feelings beneath a cheerful countenance, and smiles at misfortune, in order to buoy his spirits up, and make him feel his loss the less, will deny that here woman reigns triumphant? Who that has been a witness of the willingness with which woman foregoes the luxury and splendour attendant upon rank and wealth, rather than consent to a separation from him on whom she has fixed her affections; or heard her, when he, for whose sake she is willing to brave the world's scoff and the unkindness of friends and relations, is depicting the hardships her union with him will entail upon her, and expressing his fears lest she should sink beneath them, exclaim, in the language of the poet,

> "Though the bare earth be all our resting place,
> Its roots our food, some cleft our habitation,
> I'll make this arm a pillow for thy head,
> And as thou sighing liest, and swelled with sorrow,
> Creep to thy bosom, pour the balm of love
> Into thy soul, and kiss thee to thy rest;
> Then praise our God, and watch thee till the morning,"

will deny, that here woman stands unrivalled. Or who that has gazed upon the display of her virtues in ten thousand other different forms, will deny, that, in many respects, woman is very far the superior of man. But, Sir, while I contend that the domestic circle is the circle in which woman is peculiarly fitted to shine, do not let it be thought that I look upon her as a being merely created to superintend the domestic arrangements of man, and to become the mother and nurse of his children. No, Sir, these are woman's duties, and well does she discharge them; but they are not all, for she was created "a help-meet for man." And what is man when occupying his proper station in creation? A being, who, in addition to his mere animal feelings, is endowed by his Maker with moral sentiments and intellectual faculties capable of affording him a rich supply of mental pleasure. If this be true, and none can deny its truth, who will dare to assert woman has no other duties to perform than those just alluded to, and therefore needs but a very superficial education. If any such there be, I tell them they are utterly incapable of understanding what is implied by the term "a help-meet for man," for until it can be proved that man has no other wants than those of his mere animal nature, it is absurd to suppose woman was created merely for their gratification. Man, Sir, needs a help-meet for himself, who (in addition to managing his domestic affairs with prudence and economy), when he returns home harassed with the fatigues of business, can cheer and refresh his exhausted spirits by her enlivening and sensible conversation; who, when he stands in need of advice, can assist him by her judicious counsel; who, when he is oppressed by misfortune, can pour the oil of consolation into his bosom; or, if he is engaged in intellectual pursuits, can participate in the pleasure he derives from his mental exertions; whilst for his children he needs one who can watch over and assist

in the expansion of their infantile capacities; who can aid and direct them in the acquisition of useful knowledge; who can mildly yet firmly restrain the impetuosity of their youthful passions; and who, by the benefit of her precepts, and the influence of her example, can mould their juvenile minds into that form, which will cause them to grow up ornaments of society, and enable them to occupy the stations in life they may hereafter be called to fill, with honour to themselves and benefit to the community at large. When we remember, Sir, that

> "The very first
> Of human life must spring from woman's breast;
> Our first small words be taught us from her lips,
> Our first tears quenched by her;

and that

> Our last sighs are often breathed out in a woman's hearing,
> When men have shrunk from the ignoble task
> Of watching the last hours of him who led them,

I think it must readily be admitted, that such a being as I have described, is the being God intended woman to be, when he presented her to man as a "help-meet;" but such she never will be, until she is allowed to participate in the advantages of education equally with man. I have made these remarks lest my views of the female character should be misunderstood, and myself an advocate of the senseless system of education, considered by many, sufficient for the female sex: a system I oppose: for whilst I believe women do not possess equal mental vigour and energy with man, and, therefore, will never attain to the same eminence in literary and scientific pursuits; yet, as they are capable of engaging in such pursuits, they are equally entitled with man to have every advantage which education affords for their prosecution.

If I am asked what form of education I consider necessary for woman, I would simply answer, in one word, that which will afford her an opportunity of *cultivating and improving every faculty with which the Creator has endowed her.* This is the education to which woman has an undoubted right, and until she possesses it, society cannot rapidly advance. Earnestly, therefore, do I implore my brother members, by the love they bear to woman, to lend their most strenuous exertions to procure for her such an education as she is justly entitled to, assuring them that when this boon is extended to her, she will exercise an influence over the community at large, that will shed a halo of light around the name of England, the splendid refulgence of which will penetrate the gloom and dispel the clouds of darkness, that still hang over many nations, and will teach that the surest way to emerge from a state of semi-barbarism, and to secure moral and political regeneration, is to elevate woman to her proper rank in creation.

The Question was then adjourned upon the motion of Messrs. Baker and Brown.

Wednesday, February 22, 1837.—*The President, and afterwards the Vice-President, in the chair.*

The minutes were read and confirmed.

Mr. Roberts then delivered a very able and lengthened Lecture on Elocution. It was moved and carried unanimously, that the thanks of the Meeting be given to him, which he acknowledged, and the Meeting separated.

Wednesday, March 1*st.* 1837.—*The President, and afterwards the Vice-President, in the chair.*

The minutes of the former Meeting were read and confirmed.

Mr. Brown proceeded with the question, "Is the female mind equal to that of the male?" and argued that women are equal to man; and referred to the character of Catherine of Russia, Isabella of Spain, Elizabeth of England, More, Opie, Hemans, Somerville, Trollope, Martineau, and others. Mr. B. insisted that no gentleman had a right to assume inequality without offering good proofs for his assumption; referred to the effect of women upon society, and reasoned, that the fact of Satan first applying to Eve showed that Satan considered her as a powerful auxiliary, capable of influencing man. Cleopatra, and some Roman ladies had shown clearly women's influence. In the French revolution, women had done much. In high life, the influence of women in our own country in politics is seen; in the middle class, in proportion as women were well instructed, are the men intelligent and orderly. Mr. Brown, in conclusion, stated, he attached the greatest importance to first impressions in education, as the care of the young was intrusted to females, and the biography of most great men would show, that their greatness depended upon their mothers; Mr. B. adverted particularly to Westley's mother.

Mr. Clarke followed, and observed, that women were not educated as men, and, that, in some degree, accounted for the seeming difference. He knew there were Macauley, Morgan, Bailey, Edgeworth, and others, who had done well; and, were not women prevented, more individuals similarly talented would appear. Women should have the full means of acquiring knowledge, as their present position was not conducive to the full development of their powers. During the last thirty years, women had advanced much by education; and but for the selfishness and tyranny of man, they would have been more advanced. Upon a full consideration of the matter, he thought softness and good sense the qualities of women, the perfection of their character, and that their duties did not require the same powers as man possessed; nevertheless, power was abroad that he hoped would make all more intelligent and happy.

Mr. Baker next addressed the meeting, and said the question was not beneficial: and asserted, that he had asked several

females what they thought of the subject, and the majority admitted inequality. He thought Satan went to Eve first, because he knew she was the weaker vessel. After citing the 3rd chapter of Ecclesiastes, 5th verse, Mr. B. urged, that women going to fortune tellers showed them of weak minds. He could not admit an equality.

Dr. Epps commenced his observations by stating that he considered the subject was one of the highest moment, because error on either side must be attended with the most injurious results. For we may, on the one hand, be degrading woman when her elevation is essential to our happiness; or we may, on the other hand, be exalting her to a position, which is not consistent with her happiness, because it may consist in destroying the peculiarities of her character. Woman, as a term, may be regarded as indicative of a sex, who have characters as such. Man is human nature, modified *malely*: woman is human nature, modified *femalely*. The question is, "is the modification, connected with the latter, of such a nature as to produce an inferiority of the female mind to the male?" or, in the words of the question, "Is the female mind equal to the male?" In order to decide this question, experience must be appealed to. Experience demonstrates that women are not equal to men in the manifestation of intellectual power: that is, taking the amount of intellectual production, we cannot hesitate in coming to the conclusion that of this amount the male mind has produced the greater quantity, and this too of the best quality. This, it is deemed, all, even the most strenuous advocates of the intellectual equality of woman, will allow. The experience of the past is against them. Yes, say these advocates, we will allow this; but then this fact is dependent, not upon any real inferiority on the part of woman, but because she has never had her powers properly brought forward: her education has been neglected: and never-ceasing obstacles have been thrown in her way. This explanation of the facts presented by past experience leads to another step in the investigation, namely, IS THERE ANYTHING IN THE MODIFICATION OF THE HUMAN NATURE, constituting the female character, which makes this intellectual inferiority essential *as a part of her condition?* That there is, might be concluded from the fact, that woman has never overcome the obstacles to her progress. If she was equal to man in intellectual power, why does she not throw aside these obstacles, and march on with him with equal step. But upon this it will not be well on the present occasion to rest: it will be well to examine more particularly the feminine condition, and what constitutes that condition. Woman has to *bear children.* Woman has to *suckle* children. That these two duties belong to women, it is imagined that none will dispute. Such duties are connected with her as the part which she fulfils in realizing the command, "Be fruitful, and multiply and replenish the earth." In the performance of these two duties, the bearing and the suckling of children, it may be considered that each child occupies her, peculiarly as woman, a year and a half; and supposing that she has

six children, she has nine years occupancy of her time in pursuits peculiarly her own; and, in which, man cannot participate with her. The question is, *does the performance of these peculiar duties, for the period stated, allow the attainment of that amount of intellectual power and progress which can be attained by another individual, who has not these duties to attend to;* allowing, for the sake of argument, that both parties *started alike?* It seems not. The states of mind, connected with the two conditions of bearing and suckling children, are those which appear to excite the feelings, the domestic sympathies, rather than the intellectual powers. They seem to be the cultivators of the domestic feelings. They seem to link the woman to home; and to that more limited circle, known as home. Whereas the duties of man lead him out into society: they introduce him into a circle, where his intellectual powers are perpetually in operation, and where the wideness of his range is of necessity greater than that of women, engaged in bearing and suckling children. On these grounds, until woman is freed from the duties referred to, she cannot have intellectual equality with man, because those very duties put them both in different situations: and the members of this Society have, from previous discussions on the Influence of Circumstances, become well aware that education is nothing more than the drawing forth of the faculties by the presentation of external circumstances: and, consequently, as the circumstances surrounding and continually operating upon the mind of the male, are different from the circumstances surrounding and continually operating on the mind of the female, it is quite evident, that the development of the faculties must be different, and that the very circumstances would thus induce an inequality. This illustration leads us to the point where the woman surpasses the man: where the inferiority to the male is made up: and that is, that the circumstances surrounding the woman, having a tendency to develop her finer feelings, the domestic feelings, being a continual out-drawing of them, woman gains a development of these feelings so much superior to man, that he must be indeed a blind observer of human character, if he has not become convinced that woman is, in all the domestic relationships, and the feelings therewith connected, man's superior. We therefore should conclude, that supposing a male child and a female child were created exactly alike in intellectual, moral, and animal organization, that even they had equal physical strength, and were treated and educated exactly alike, that when the period came for their union as man and wife, that the results of that union in inducing the female to become a bearer and a suckler of children, and the male in going out and coming in contact with his fellow men in obtaining the means of supporting those children, thus begotten, would induce a development of the intellectual powers more particularly in the male, and of the domestic feelings in the female, and thus would produce a difference between them. In connexion with this, the interesting fact may be referred to, that many young females, who have, previously to having children,

expressed great dislike to children, afterwards have become most devoted to their own children, and have felt the most intense delight in the gratifications connected with them: that is, the circumstances of bearing and suckling children develop feelings; in fact, educate them as women. But this organization, Dr. E. stated, he was not inclined to refer to the influence of circumstances. He believed that the organization was created for the circumstances, and that the female head is larger in its developments, in connexion with the domestic feelings, than the male head is. Dr. E. then proceeded to show, that the peculiar organization of woman, is one which strikingly accords with the views already promulgated; and that this organization, manifesting as it does, and that most beautifully, the development of those organs which tend to cast their beauteous activity around the domestic circle, proves most satisfactorily, that it was intended that woman should fulfil the duties peculiarly hers, and which, to enable her to perform, the Creator has endowed her with an organization beautifully correspondent to, and powerfully productive of, the capability necessary for the performance. Thus when this circumstance, this physically demonstrable circumstance, namely, *that woman has the organs of the domestic feelings more largely developed than man has*, is added to the other evidences; First, that taking the past history of intellectual production, and perceiving that woman has not produced either in quantity or in quality what man has produced: taking, second, the fact that woman, from her peculiar character, as woman, has duties to perform which have a tendency to develop the feelings, the domestic feelings: and taking also into consideration, that the circumstances in which man is placed have a tendency to develop the intellectual powers: and taking the additional fact, that the organization of woman is one exhibiting the superior development of the organs of the domestic feelings, we are led to the conclusion, that the male mind is superior to the female in intellectual power, the female mind to the male mind in domestic feeling. While maintaining this conclusion, it is a duty at the same time to maintain, that woman should have the best possible education; that, until the period arrives when they are called upon to undertake the duties which God has appointed them, they should have their minds stored with valuable information, and strengthened by every exercise of intellectual skill. For no one can deny that as it is to woman that the earlier periods of our existence are entrusted, how important is it that she should be able to impart useful and solid instruction to the infant mind; to develop its powers; to explain the facts of nature and the beauties of science; to be able to devise perpetual and ever-varying supplies of intellectual and moral food for the satisfaction of her progeny: and how can she do this without having had an excellent education? The advance which would thus be induced in society would be immense; and, therefore, strenuously ought the education of woman to be maintained; and strenuously ought he to be opposed, who would at all throw barriers in the way of female education. Dr. Epps then asserted,

that the view he had developed gave neither a priority over the other: for such view taught that man is not a perfect being unless he is united to woman; and woman is not a perfect being, unless united to man. AFFECTION must be bound with INTELLIGENCE, to constitute a perfect individual. And here, added Dr. Epps, I cannot help remarking, that this is the only legitimate marriage there is, the union of intelligence and of affection: a union productive of the most delightful results, because producing a beautiful unity, which must command the admiration as well as the sympathy of all. Now, supposing that woman was similar to man, and equal to him in all respects, there would not exist this union: they would be two intellectual moral units, who would move in their sphere of singleness; but the want of affection, as preponderating in the one, would destroy the glorious tie, which would make of them twain one flesh: would want that condition, necessary to the illustration of the scripture declaration, "that the desire of a woman shall be towards her husband, and he shall rule over her:" that is, that the affection on her part shall be the strongest feeling; the intelligence, on his, the strongest power.

Dr. Epps, at the conclusion of his speech, stated, that the various opinions and facts brought forward by him might be summed up under the following heads:

First, That the physical constitution of woman indicates that she has certain individual duties to perform.

Second, That these duties require that she should be occupied in pursuits, quite different from those which occupy the man.

Third, That while the duties of the man tend to develop his intellectual powers more particularly, the duties of the woman tend to develop her feelings.

Fourth, That thus man gains a superiority over woman in reference to certain powers of the mind, and woman gains a superiority over man in reference to certain other powers of the mind.

Fifth, That this mutual superiority is dependent upon *original* organization, and not dependent wholly upon the developing influence of circumstances.

Sixth, That in order to render woman fitted to perform her duties, it is necessary that she should have an excellent education, previous to the period at which her peculiar duties arise.

Seventh, That till that time the distinction of sex should be recognized only so far as is connected with the rendering woman able to perform her duties satisfactorily.

(To be continued.)

"NO EFFORT IS LOST."—A sentiment of *Gilbert Wakefield*, A. M. who died in the Fleet, where he was confined for the advocacy of Reform principles.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

No. 10.] JUNE 1, 1837. [Vol. II.

A PHRENOLOGICAL ANALYSIS OF THE HISTORY OF A BOY, BORN BLIND AND DEAF,

Under the treatment of J. Wardrop, Esq., F. R. S. *Surgeon.*

By John Epps, M. D., *and read before the Anthropological Society, March* 16, 1837.

(Continued from page 276.*)*

The case of the lady is one of peculiar interest, and may be given in the words of Mr. Wardrop.

"Though it has been observed, that there is no example of a human being *born* deprived of the sense of sight and hearing, there is on record an account of a lady, who, when considerably advanced in years, became blind and deaf, at the same time losing her organ of voice. Whilst, therefore, young Mitchell's history affords an example of an individual deprived from his birth of two important avenues of perception, this lady shows in a very remarkable degree to what extent some of our organs of sense may be improved when others are extinguished at an advanced period of life. The sense of touch, which in the blind man usually acquires such delicacy, in this lady became excessively acute, and her smell attained a degree of perfection which has been equalled only in young Mitchell. As this lady's case acquires particular interest when brought under review along with that of young Mitchell, I shall conclude this memoir, by quoting some account of it.

"This unfortunate young lady was seized with the confluent small-pox, by which she was deprived of her hearing, her sight, and her speech. After this disease, she was seized with most violent convulsions, which affected her whole body, deprived her of speech, and produced such a stricture in her throat, as prevented her from swallowing any kind of aliment, either solid or liquid. Yet in this condition she continued near three quarters of a year, and during that time was supported in a very uncommon manner, by only chewing the food, which being turned often and kept long in her mouth, she was observed at last to spit out. Liquors were gargled about in the mouth for some time, and then returned in the same manner, no part of them having passed the

throat by an act of deglutition. They must, therefore, have either been absorbed by the proper vessels in the mouth, or trickled down, in a very small quantity, along the gullet into the stomach. But there were other peculiarities, in the case of this lady, still more extraordinary. During the privation of her sight and hearing, her touch and smell became so exquisite that she could distinguish the different *colours* of silk, and knew when any stranger was in the room with her. After she became blind and deaf and dumb, it was not easy to contrive a method by which a question could be asked her and an answer received. This, however, was at last effected by talking with the fingers, at which she was uncommonly expert. But those that conversed with her in this manner were obliged to express themselves by touching her hand and fingers, instead of their own. A lady who was nearly reelated to her, wearing an apron which was embroidered with silks of different colour, asked her, in the manner which has been described, if she could tell what colour it was? And after applying her fingers attentively to the figures of the embroidery, she replied, that it was red and blue and green; which was true. The same lady having a pink-coloured ribbon on her head, and being desirous of still further satisfying her curiosity and her doubts, asked what colour that was? Her cousin, after feeling for some time, answered, that it was pink colour. This answer was yet more astonishing, because it showed not only a power of distinguishing different colours, but different varieties of the same colour. The riband was not only discovered to be red, but the red was discovered to be of the pale kind called pink.

"This unhappy lady, conscious of her own very uncommon infirmities, was extremely unwilling to be seen by strangers, and, therefore generally retired to her chamber, where none but those of the family were likely to come.

"The same relation who, by the apron and riband, discovered the exquisite sensibility of her touch, was soon after convinced by an accident that her power of *smelling* was acute and refined in the same astonishing degree. Being one day visiting the family, she went up to her cousin's chamber, and after making herself known, she intreated her to go down stairs, and sit among the rest of the family, assuring her that there was no other person present. To this she at length consented, and went down to the parlour door; but the moment the door was opened, she turned back, and retired to her own chamber, much displeased, alleging that there were strangers in the room, and that an attempt had been made to deceive her. It happened, indeed, that strangers were in the room, but they had come in whilst the lady was above stairs, so that she did not know they were there. When her cousin was satisfied of this particular, she was pacified; and being afterwards asked, how she knew there were strangers in the room, she answered, by the smell.

"But though she could by this sense, in general, distinguish between persons with whom she was well acquainted, and strangers, yet she could not so easily recognize one of her acquaint-

ances from another person without additional assistance. She generally distinguished her friends by feeling their hands, and when they came into her presence, they used to present their hands to her, as the means of making themselves known. The form and temperature of the hand produced, in general, the differences which she remarked; but she sometimes used to span the wrist, and measure the fingers. A lady, with whom she was very well acquainted, coming in one very hot day after having walked a mile, presented her hand as usual. She felt it longer than ordinary, and seemed to doubt whose it was, but after spanning the wrist and measuring the fingers, she said, 'It is Mrs. M. but she is warmer to-day than ever I felt her before.'

"To amuse herself in the mournful and perpetual solitude and darkness to which her disorder had reduced her, she used to work a great deal at her needle, and it is remarkable that her needle-work was uncommonly neat and exact. She used also sometimes to write, and her writing was yet more extraordinary than her needle-work. It was executed with regularity and exactness, the character was very pretty, the lines were all even, and the letters placed at equal distances from each other. But the most astonishing particular of all, with respect to her writing, was, that she could by some means discover when a letter had been, from mistake, omitted, and she would place it over that part of the word where it should have been inserted, with a caret under it. These circumstances were so very extraordinary, that it was long doubted whether she had not some faint remains both of hearing and sight, and many experiments were made to ascertain the matter; some of these she accidentally discovered, and the discovery always threw her into violent convulsions, so poignantly did she feel any suspicion of insincerity or deceit.

"Her family were at last perfectly convinced from the experiments which they made, and several accidental circumstances, that she was totally deaf and blind. Sir Hans Sloane, her physician, being still doubtful of the truth of facts, which were scarce less than miraculous, was permitted to satisfy himself by such experiments and observations as he thought proper; the issue of which was that he pronounced her to be absolutely deaf and blind."*

This case is highly interesting; and taken in connexion with the case of the boy afford data, tending to throw much light upon the operation of the senses.

Thus, in the case of the boy, the fact was clearly established that the perception of *distance* is not dependent upon the eye; in this case, the fact is equally well demonstrated that the perception of *colour* is not dependent upon the eye: this lady, as the perusal of the case has made known, being able to distinguish colours, even when she was blind.

The additional truth is also taught that the perception of *form* is not dependent upon the eye, because this lady when blind wrote

* See Encyclopedia Britannica, article *Blind*.

well, and even level; and could correct mistakes, putting the caret under the spot where she had left out a word or phrase.

Such facts must be considered of the highest importance. They declare the accuracy of the principles of Phrenology: this science teaching that the perceptive powers in the brain perceive the phenomena of colour, form, size, distance, &c. &c.; which therefore the lady was enabled to perceive though the organ of vision ceased to convey impressions.

Persons make great mistakes in regard to the functions of the senses.

An individual who thought his experiment very clever and phrenologist-entrapping, once requested a man with weak and inflamed eyes to call upon me. I was asked to examine him. I did, and said that he was deficient in the organ of colour, and that I should imagine he could not distinguish colours. His wife, who was with him, said that was quite true; for he often put buttons of the wrong colour on the coats he made, and would introduce, if she did not watch over him, pieces of cloth of the wrong colour into the dresses he made.

The man went back to the philosopher who sent him; and stated what I had said. This individual immediately began to laugh at Dr. Epps, because the want of power of distinguishing colours was to be referred, so this philosopher thought, to the weakness and the affection of the eyes, not allowing the eye to convey proper impressions. And he thought in the simplicity of his enlightened understanding, that he had given Phrenology a tremendous blow. If, however, he had been a true philosopher, he would have enquired, did not the man manifest this want of power of distinguishing colours even before his eyes were bad, and he would have found that he did: which would have settled the question. However, this common-sense mode of examining the question did not occur to the longing aspirant for anti-phrenological honours.

A valued phrenologist, Mr. Behnes Burlowe, took a mask of the man's face and forehead, and this mask presented a striking deficiency in the organ of colour.

The above recorded cases, however, satisfactorily demonstrate that the perception of colour is not dependant upon the eye simply: that the eye is the usual vehicle for conveying impressions that awake in the brain the organ of colour; but, that in extraordinary cases, there are other mediums through which this organ, as well as other organs, can be called into activity.

The perusal of these cases has, no doubt, excited much interesting reflection; and will have the effect of directing the thoughts of the Society into channels highly useful in the determination of the operation of the senses and the organs of the brain: thus affording to the oculist many useful data, by correcting his diagnosis and prognosis respecting affections of the eye: to the philosopher, means by which he will be able to reduce to scientific exactness the functions of the cerebral organs and the functions of the five senses: thence enabling him to devise means by which both the senses and the perceptive powers may be educated aright.

DROWNING-AT-SEA SOCIETY.

The following petition we recommend to the attention of our readers, as tending to keep alive the impression of the horrors connected with the Drowning-at-Sea Society.

A society, the character and the operations, of which have been fully detailed in the various Essays in the first volume of the *Christian Physician:* Essays, which we particularly recommend to the reconsideration of our readers, it being absolutely necessary that the attention should be kept alive, since the remedy to these evils will never be provided, till the public calls upon the legislature to enforce regulations suited to the enormity of the evils themselves.

> Unto the Honourable the Commons of the United Kingdom of Great Britain and Ireland, in Parliament assembled. The Petition of the Chamber of Commerce, in the Royal Burgh of Kirkcaldy, Fifeshire, Scotland.

Humbly Sheweth—That your petitioners cannot but regard, with the deepest concern, the vast waste of human life, and destruction of national property, arising from shipwreck.

That your petitioners, while it must serve their best interests, consider it their imperative duty, to watch over the general commerce of this great trading country, and have diligently perused the report of the select committee of your Honourable House on Shipwrecks, than which no public document could deserve greater encomium, not less from the distinguished talent it exhibits, in setting forth so strongly, and in so clear a light, so many startling facts hidden before, in a great measure, from the British community, than from the great national interests it involves.

From this report, your petitioners observe, that the loss of property not only may be assumed to be, but in reality amounts to, several millions sterling per annum; a considerable portion of which, by means of the present mode of insurance, is extracted from the pockets of the British public, while a fractional part, (and that very seldom) falls on those directly employed in its conveyance.

That while your petitioners must declare such a waste of national property to be most condemnatory, they would more particularly request the best attention of your Honourable House, to the loss of human life, estimated much too low at one thousand persons in each year, and arising in a great measure from the same cause, the present system of marine insurance, and which loss of human life must necessarily entail pecuniary burdens on the public, for the maintenance of widows and orphans left destitute by such bereavements, and that such loss of both life and property is greatly susceptible of diminution.

That your petitioners are under a conviction, next to certainty in their own minds, that many of these losses originate from defective construction of merchant ships, generally, and the very

unsafe state in which they but too frequently proceed on their voyages, and that both these defects, in the humble opinion of your petitioners, are chiefly to be traced to the present operation of marine insurance, which enables the ship-owner so to insure the cheapest and worst constructed vessel, as also the freight on the cargo, that he can run no hazard of loss of property by shipwreck; and that the ship-owner, if dishonestly inclined, while he can easily insure a full and fair freight, may *over insure* worthless vessels, against which, at present, there is no possible check. And that your petitioners apprehend, such cases too often occur.

That your petitioners can only name one remedy for so deep rooted and long continued an evil, as the system of marine insurance now in practice, and that is, an Act of Parliament, emanating from your Honourable House, having for its object not only the prosperity of our mercantile navy, but commerce in general.

May it therefore please your Honourable House, to give to this important subject your earliest and best consideration; a subject so deeply affecting both the lives of British seamen and British subjects, and also the national property to a great extent, and to adopt remedial measures so as to encourage special attention and regard to safety, in the building of merchant vessels. To appoint boards of supervision, competent to examine and report on vessels before proceeding to sea, and especially to enact that all masters and mates of vessels shall be found qualified, by proper examinators, for their respective duties; and also to adopt such other measures, as recommend themselves from the report of the select committee on shipwreck, all to be embodied into an Act of Parliament, to be passed for the purpose: that an evil, so generally and so justly complained of, may no longer continue for the benefit of the few, and the disadvantage of the many in this great empire, the emporium of commerce.

And your petitioners shall ever pray, &c.

Signed, in name and by appointment of the Chamber,

JAMES NORMAN, Junr. Chairman.

EARLY MUSICAL POWER:

THE PECULIAR NECESSITY OF PHYSICAL EDUCATION WHEN ANY ORGAN OF THE MORAL FEELINGS OR OF THE INTELLECTUAL POWERS IS LARGE.

It seems to be a truth, that, with the activity of any of the intellectual organs or of the organs of the moral feelings, when largely developed in early life, there is an intensity of cerebral excitation produced, which is decidedly unfavourable to health. This does not seem to be the case with the activity of the organs of the animal feelings; these seem rather to occasion a healthy activity, and not to disturb the general system. Of the former fact Dr. Spurzheim

was fully aware. We know some instances where his recommendation to the parents of children, endowed with large organs of the moral feelings, to attend principally to the physical education of the children, has been attended with the most happy results.

And, in drawing attention to the following interesting case, we feel impressed that we are doing a duty to society by awakening attention to the above stated truths, and thereby, we hope, saving the lives of many of the most interesting of the human family. This case is contained in the following letter, which is most earnestly recommended to the attention of the reader.

May 24, 1837.

Dear Sir,—The little musical prodigy, Henry Symmondson, that I was pleased in speaking of when last I saw you, was the son of a piano-forte tuner and teacher of the violin, his mother also was able to acquit herself pretty well at the piano; so that the earliest dawning of their child's perception of *sounds* was distinctly marked previous to its capability of speaking. This was particularly observed when the parents accompanied each other in a pastoral subject, or placid air: under such a circumstance the dear little creature seemed to express, by his vivid and expressive looks, the great pleasure he experienced,—and *vice versa*.

From the time he could stand alone he often amused himself by rambling over the keys with all the sedateness of a student. In fact, he was then imbibing a knowledge of sounds, which for rarity and correctness, is seldom if ever acquired at so tender, or even advanced age.

At a little more than three years old he could tell the *sound* of every note in the piano, or whatever else would impart sound, and name it with a readiness and precision, that astonished every one. If his attention was called to a sound *between* the *naturals* and *semi tones*, his answer was "*no* note at all:" which remark, whilst it proved the correctness of his ear, constituted the only answer he could give, there being no term to designate *quarter* tones.

On one occasion his father was giving a lesson on the violin to a very tall man, whose ear was of the obtuse character; often expressing *flats* and *sharps* in the natural key. This outrage was too great to be silently endured by this notable living little *tuning fork;* and, with an indignant air, he accosted the gentleman, "You stupid fellow, can't you hear?" On one occasion, naming the little dear's talent to a professional gentleman of some notoriety, he could not believe my statement. To convince him a day was fixed,—I had the child brought to my house,—the professor came, and he very *playfully* put the bantling in the corner of my shop, and tried him upon half a score different pianos, dodging him all over the keys, and yet always had a correct answer to his innumerable questions. He next tried the little fellow in *chords*,—and whilst engaged in swinging by his little hands from one of the instruments, and his little petticoats sweeping the floor, he told with the greatest facility the predominant key in each, without being at all conscious of any thing *peculiar*, much less a desire to gratify vanity at another's expence. However, it pleases me to add, that

after the professor had done catechizing, the little fellow, wanting to play a little longer, proposed to put the gentleman in the corner, saying "it was his turn." We readily secured to the child his fair and legitimate claim,—and never was there a triumph of nature more decided and complete over education and years of toil, than that which was soon manifested. After a great number of times, the teacher failing to answer the child *correctly*, he very prudently, to save further mortification, said he would *play* no longer; and taking up his little superior, kissed him with a feeling of rapture and astonishment, better conceived than expressed. To the lasting sorrow of his parents, and all that knew him, I regret to state, when four years old, he was removed from hence to the silent and tuneless grave.

I remain, Sir, your obedient,
J. CARTER.

44, Duke Street, Manchester Square.

We thank our correspondent for this delightful letter. Our correspondent must have large benevolence and ideality. What poetry more beautiful than the idea, taken in connexion with the preceding history, conveyed, "he was removed from hence to the silent and tuneless grave."—Ed.

N. B. We shall be glad if any of our correspondents will favour with similar cases, authenticated as the above.

FREE MEN THINK.

While princes rule by whip and steel,
Are *we* to bend the knee?
When heaven gave *us* power to feel
That we were born as free.
Shall freemen, like poor slaves, be brought,
To fear oppression's links,
With bumpers let us drink, *in thought*,
A health to him who thinks.

Tho' they may bind us round and round
With chains in dungeons fast,
Our minds shall ne'er in chains be bound
While reason's strength shall last.
We'll tell it to the dungeon walls,
We'll breathe it thro' its chinks,
Good men shall drink, in good men's halls,
A health to him who thinks.

All nature craves that men should think,
Each one in his degree;
For thinkers ne'er a nation sink,
They keep a people free.
There's not a bird on tree or wing,
That of sweet music drinks,
But seems instinctively to sing,
The health of him who thinks.

A. H.

ON THE DIFFERENT VARIETIES OF THE *OUTER* OR *BACKWARD CURVE.*

To the Editor of the Anthropological Magazine.

Dear Sir,—I concluded my last letter with the bold and confident declaration of Dr. Pemberton, who was, till the time of his painful seizure with tic douloureux, one of the busiest and most esteemed physicians in the circles of fashion. He not only spoke his own sentiments on the occasion, but they were in strict accordance with those of all the medical practitioners of that day.

Another physician, a distinguished writer and popular teacher of youth, stated to me in conversation about the same period, that the spinal pillar was not jointed. On my answering, that so far from his statement being correct, it contained no less than twenty-four separate articulations, he promptly replied, that they could hardly be called joints, *as there was no power of motion in them.* I reminded him of the extraordinary flexions, and varied gestures exhibited on the stage by professed adepts in these arts. He then became silent. I have introduced these anecdotes in order to show how ignorant the faculty were, at *that time*, of the anatomical structure of the vertebral column. If juster notions have begun to prevail amongst us, it is owing to the numerous discussions that have subsequently taken place. To these the bigoted zealots, feeling their hopeless condition, now submit in silence, while they verify the old adage,

> "He that's convinced against his will,
> Is of the same opinion still."

None of them has the candour openly to retrace his steps, or acknowledge his error. Even the cautious Sir B. Brodie has twice addressed the public, on spinal complaints, in the short space that has elapsed since I published my animadversions upon his lecture. Knowing the impossibility of defending his position with any chance of success, he has not presumed, on either occasion, to advert to his lecture, or notice my remarks upon it. A prudent general acts otherwise. He never marches into a new country till he has fortified his old station, and made it tenable in the event of a retreat becoming necessary. Sir B. B., rendered confident by unexpected prosperity, has seemingly neglected all former precautions, and entangled himself in his own toils; declining, at the same time, the proffered combat, that he may avoid a defeat, which he knows, were he to enter the lists, must be certain, complete, and irretrievable.*

* Since concluding the present Letter, it was communicated to me by one of my former spinal patients, on the authority of *his medical adviser*, that a certain person had discontinued my treatment, and is not entirely cured. The statement is, I admit, correct; I only complain, that the *whole truth has not been told.* About five years since I was applied to by a young lady, with a *severe double*

I omitted, in my last letter, introducing some cases of the backward curvature, which I intended to describe. This omission I now proceed to supply.

First case.—I was consulted about three years since for a little girl only eight months old at my first visit. She had probably taken, under medical advice, before I saw her, a quarter of a pound of calomel in divided doses. She had been afflicted with convulsive fits, during the greater part of her short life. They averaged from 100 to 150 distinct paroxysms in twenty-four hours, each lasting from one to three minutes. The arms and the legs were, during the whole time, in continual and violent action. The countenance was never at rest, changing rapidly, and frightfully agitated. The eyes rolled about incessantly, with a vacant and unconscious stare. The eyelids kept opening and shutting with a spasmodic effort. When the fits ceased the child was quite exhausted, and appeared completely fatuitous: taking no notice of anything, and so languid as hardly to manifest any evidence of vitality. The mental faculties were seemingly obliterated. The fits have gradually increased in frequency and severity from their first invasion.

Many eminent members of the faculty attended the child at different times. All of them placed *the seat of her disease in the brain*, and applied their remedies exclusively to it. Not one of them had seen the *back*, or made any enquiries about it, so convinced were they that the malady originated elsewhere. I visited the little sufferer in company with her relation and a highly talented physician, who had previously visited several of my spinal patients. He desired to see the back; we found *three of the lower dorsal*, and as many of the *upper lumbar* vertebræ, projecting beyond the rest, and extremely tender to the touch. I pronounced the source of the complaint to be in the protuberant vertebræ, and not in the brain; and explained, that *the nerves, in passing out from the spinal cord, along the contorted notches, were fretted and irritated.* The morbid impression thus produced being conveyed by the spinal nerves to the fifth and seventh pairs, was displayed in their expansions on the face and eyes. In this way I accounted for the spasmodic affections of the eyes, palpebræ, and cheeks. As to the tossing of the limbs, that was traceable to the

---

lateral curvature. After trying a great variety of remedial measures to no good purpose, she then placed herself under my care. By the means employed, the lower curve soon disappeared. Afterwards the upper bow was so much reduced, that the family, for *private reasons*, wished the practice to be discontinued. It was so; but the question having arisen about the safety of her speedy removal within the tropics, a consultation was held on the subject with Sir C. M. Clarke and Sir B. Brodie. We all agreed in opinion. Before Sir Charles left the room, I desired him to see one of his old patients, a lady of title, whose deformity was, I said, *entirely eradicated by my treatment.* I added, that, on its removal, she had also been cured of an inveterate catalepsy. Having formerly invited Sir B. Brodie to visit several cured patients of his own, and having received no answer in return, I did not renew my application to him. How the report has got before the public I know not, and, with the foregoing explanation, I willingly dismiss the subject.

crural and brachial nerves, which, issuing as they do out of the spinal cord, might be expected to suffer along with it.

The patient was placed under my plan of treatment when she had completed her ninth month, upon the usual couch, with a stuffed shield applied over the protuberant vertebræ, and fixed there constantly by means of a tight bandage. She had not been more than three days in this new position, before the redness, tenderness, and fits entirely left her, and have never returned. It therefore follows, that by this simple process, without an additional grain of mercury or other drug, she was permanently cured by rectifying the displaced vertebræ, and in no other way. The most gratifying part of the history remains to be told. Her dull and languid face was soon converted into a bright and animated countenance. She was so entirely changed, that her faculties, both mental and corporeal, came prominently forward, and she soon equalled other children of the same age in her natural endowments. Such was the happy result of the practice adopted for this delicate child. After a period of three years, I can safely add, that she has experienced no relapse, or fallen back in any respect.

The termination of this case proves incontestably, that the maladies of the spinal cord are not only more numerous and diversified than has hitherto been imagined, but that this part of the human frame has powers of its own, and can employ them independently of the brain. Consequently, to call the spinal cord, as many do, *a subordinate member*, *a mere appendage of the brain*, is to misrepresent its powers, and place its capabilities below their natural standard. The nervous system, collectively taken, is a great and most influential portion of the animal composition. All its parts are intimately linked together, and are, moreover, called into simultaneous operation. The mind wills and communicates its directions, through the spinal cord, to the remotest and most dissimilar parts of the body. In this way the spinal cord, the organ of motion, is frequently brought into play merely on account of its central position between the brain and the nerves. The mind, enthroned in the brain, directs, and volition is carried along the spinal cord, to the nervous expansions. Again, an impression made upon the latter is conveyed through the spinal cord to the brain, where it is revealed to the mind. As these processes are continually going on in the living system, the spinal cord appears, to superficial observers, to be only an appendage, or inferior agent, situated between the brain and nerves. Many cogent arguments may be opposed to this ancient doctrine, although they could not be enforced, and fully understood till of late. Some of these I shall shortly produce. The brain, in its ordinary signification, comprehends the cerebrum and the cerebellum. Under the title of spinal cord, I do not merely include the portion enclosed within the vertebral canal, but, from the similarity of their functions, the medulla oblongata also. The brain is the organ of the mind; the spinal cord the instrument of motion. The nerves proceed partly from the brain, partly from the organ of motion. The GREAT SYMPATHETIC NERVE, the remaining division of this important system,

communicates in a canal, (through which the carotid artery passes through the skull into the brain,) by a small fibril with a branch of the fifth and also with the sixth pair of nerves; these nerves belonging to the spinal nerves, or those coming from the spinal cord. This sympathetic nerve passes out of the skull along with the great blood vessels, to traverse the neck, thorax, and abdomen. In the course of its long route, it receives many nervous branches from the spine, and supplies the internal organs plentifully from that source.

After this cursory survey of the nervous fabric, we shall be better able to comprehend what remains to be said of the nature and functions of the organ of motion, and to see how it is called into action by its close connection with other parts. All this had been clearly perceived, and frequently observed, from the remotest antiquity, *but its independent and inherent powers were concealed and incomprehensible to the faculty, until I succeeded in correcting and eradicating the contortions and deformities of the vertebral column.* From that moment they were made apparent, and the offices of the spinal cord, or organ of motion, must soon become objects of anxious investigation. The information thus acquired, and its *immediate influence upon the doctrines and practice of medicine, will be great and lasting. It is destined to produce an entire revolution in the healing art;* for it will then be seen, and universally admitted, that the nervous power is the only active agent in the living system. That it originates and controls all movements and operations, both in health and in disease, from the cradle to the grave. To investigate the laws of vitality, and regulate its multifarious operations on the animal economy, will henceforth be the primary considerations of medical research. The physician, who is so occupied, will be the handmaid of nature; and will be held in the highest estimation, because of his valuable services and usefulness to the community.

Second case.—I was lately consulted for Master Munro, a fine boy, aged only ten weeks, the son of an officer in the blues. The application was preferred to me on the recommendation of the regimental surgeon, a talented and experienced physician. Three of the inferior dorsals, and as many of the upper lumbar vertebræ, were jutting boldly out of the column like embossed work. I was told, that the athletic nurse frequently held the tender infant by one leg, with his head hanging down, for several minutes together. In this awkward situation, he use to writhe and twist his body violently, and in every direction. To these contortions I attribute the early displacement of the vertebræ. The usual stuffed shield being fixed over the protuberant bones, with a suitable bandage attached, he was laid horizontally upon a hard surface. On removing the shield the following morning, to rub the back, the vertebræ had sensibly receded, and in less than a week were found to have recovered their natural places in the spinal pillar. We have, in this instance, a convincing proof of the speedy removal of contortions and deformities, where the proper means are early adopted and carefully enforced. After a lapse of five months the vertebræ remain fixed and unmoved.

Third case,—Is in every respect a contrast to the former, and shows the mischievous consequences produced by the neglect or mismanagement of spinal disorders. Miss S——, the daughter of a distinguished member of parliament, has been severely afflicted with a spinal complaint from the age of twelve to upwards of sixty. During the last forty years she has, from necessity, passed more than two-thirds of her miserable existence in the horizontal posture. She has all the time been under the care of eminent members of the faculty, either in England or upon the continent, without obtaining more than temporary benefit from any of them. When she lately consulted me, I found four inferior dorsal vertebræ, and three superior lumbar vertebræ projecting beyond the rest. The spinal protuberance is not considerable, and might, in early life, have been easily and completely eradicated: an assertion I make confidently, because I have cured many similar, but more severe, examples of the same kind. She would then have recovered her constitutional symmetry, her natural activity, and the full possession of her bodily powers. Being a lady of great intellectual endowments, and the daughter of an influential senator, she was destined, had health permitted, to fill a distinguished place in society. Instead whereof, she has been doomed through life to live in continual retirement and unceasing misery, equally useless to her friends, and burdensome to herself.

According to my experience, derangements in this division of the back are generally more distressing to bear, than in other parts. Of course I told the lady, that after enduring her complaint for so many years, it would be impossible, I thought, to entirely remove it; but I should be able to lessen her afflictions, and make her more comfortable. With this intention, I fixed the usual shield over the displaced vertebræ, and confined it there, except when she arose from her couch to dress and leave her room. She was then furnished with support stays adapted to her figure. By these contrivances she not only partially reduced the projection, but has been enabled to sit up, and walk about several hours every day, with ease and pleasure—a gratification that she had not enjoyed for many years.

I have in this and the preceding letter recorded four severe cases of deformity. The first, a lady of more than forty, had endured her sufferings unrelieved sixteen years. The second, a delicate child, was troubled with epileptic fits, and would probably have been tormented with them through life, had the spinal pillar remained so long displaced. There was, moreover, great reason to apprehend from the appearance of her countenance, and other attending circumstances, that she would at length have been a confirmed idiot. The third was so young, that although the anticipations were gloomy, nothing could be fully decided as to the future. The fourth is a very interesting and instructive case: a lady, born to affluence and elevated rank, lost all the pleasures of life, and advantages of birth, through a spinal malady, which began early, and continued unabated to the age of sixty years. I then first saw her. She was made much more comfortable by my

suggestions and interference, but of course the extruded vertebræ were too firmly and durably fixed in their assumed places to admit of entire replacement in the column. All that art could effect under such unfavourable circumstances was to moderate her sufferings, and make her days roll onwards more comfortably for the remainder of her existence. This was really accomplished to such a degree, than she can sit and walk erect for an hour or two continuously, without feeling either pain or weakness in her back or limbs, a pleasure that she had not experienced for many years perviously to my attendance. To what extent her recovery may be ultimately carried is of course uncertain, but it has not, I am persuaded, as yet attained to its full extent.

Another variety of spinal curvature, the most extensive of them all, remains to be described. In it the vertebræ of the back and loins are distorted from the top to the bottom of the column. Sometimes the cervicals also participate. In this example the spinal pillar is pushed outwards, like a bow more or less bent. Persons, so afflicted, stoop prominently forward. The eyes incline constantly towards the earth, and the arms hang down with a perpendicular bearing. Individuals so afflicted can with difficulty assume the erect posture, and soon fall back again. On examination, the spinal pillar is found to be everywhere protuberant, although particular vertebræ project more than others. The superior and lower limbs are in these cases infirm and feeble. The constitutional health is likewise deteriorated, because the internal viscera, being more or less deranged, cannot freely exercise their functions. Few elderly people are entirely exempt from this malady, which, from its frequency, is familiarly called *the old man's stoop*. I have also seen it in young children, from bad management. It is the common custom of nurses to carry children resting with their bottoms upon one arm, and leaning against the bosom. In this position the lumbar hollow is generally so entirely effaced at the time, that the loins actually bulge outwardly. On changing their position, the loins again resume their natural form. A frequent repetition, or long continuation of this mode of nursing, leads at length to a fixed projection of the lumbar vertebræ. In this simple way many spinal deformities are produced, which would have been avoided with proper care. For example, if infants were to be carried *lying flat upon a firm cushion*, as in the east, spinal distortions would be much less frequent among us. The change could be easily made, and the benefit would soon show itself, in the increased health, and vigour, of the rising generation.

Another, the fifth and last variety of the backward distortion, remains to be noticed. I mean a curvature of all the cervical, and generally also of several of the upper dorsal vertebræ. Of this deformity I have met with various instances. In it the head sinks downwards, and is sometimes firmly fixed to the chest. The neck is bent like that of the crane, and the vertebræ stand out of the column boldly and prominently. I have procured drawings of this deformity. When they are engraved, I shall request a place for the prints in

your Journal. I am the more desirous to make this distortion extensively known, because if it be suddenly produced by falls, hurts, &c. the result, unless prompt assistance be given, is speedily fatal. When its *invasion* is slow, the inconveniences arising are very distressing to the sufferers, and unpleasant to the sight, but its baneful effects are more distant, although not less certainly fatal.

EDWARD HARRISON.

Holles Street.

CHURCH DOMINANT.

There is a passage in the life of Alexander Peden, the great patriarch of the Scottish Cameronians, which often rises to our mind; it is the murder of John Brown, by the "bloody Claverhouse," the celebrated captain of the church cavalry. John Brown was just going out to cut peats, when he and his house were surrounded by Claverhouse with three troops of horse. Claverhouse said to him, "take good night of your wife and children." His wife was standing by with her little ones in her arms; he came to her, and said, "Marian, the day is come that I told you would come, when I first spoke to you of marrying me." She answered, "Indeed, John, I can willingly part with you." Then he said, "This is all I desire; I have nothing to do but to die." He kissed his wife and babes, and wished all blessings upon them. One would have thought this scene enough to have touched the heart of a fiend; but what fiend is so hard as a Tory church murderer? Claverhouse ordered six soldiers to shoot the man. The most part of the bullets came upon his head, which scattered his brains upon the ground. Claverhouse said to his wife, "What thinkest thou of thy husband now, woman?" She replied, "I thought ever much of him, and now as much as ever." He said "It were justice to lay thee beside him." She answered, "If ye were permitted, I doubt not but your cruelty would go that length; but how will you make answer for this morning's work?" Hear the remarkable answer of this scarlet emissary of *church and king*; "*To man I can be answerable, and for God, I will take him in mine own hand.*"—*Copied from the Constitutional, Wednesday, April 19th,* 1837.

INTOLERANCE AND WIT.

Upon the gates of Bandon was written:—

Here enter Turk, Jew, or Atheist,
Anything but a Papist!

Underneath—

Whoever wrote the above, wrote it well,
For the same is written on the gates of hell.

This instance of intolerance, and also of repartee, was stated by Mr. O'Connell in his place in the House of Commons, June 3, 1836, on the Irish Church Bill.

SONG,

DESCRIBING AN ANIMAL NOT MENTIONED BY BUFFON.*

O heard ye of a creeping thing,
That good men call a Tory?
It carries an envenom'd sting,
And treach'rous is the Tory.
It lives on sweat, and blood, and tears,
On young men's hopes and old men's fears,
Where'er is ignorance, there rears
Its hydra head, the Tory.

'Tis found nigh churches rich and old—
Most pious is the Tory;
Nigh thrones that are inlaid with gold—
And loyal too; the Tory.
It crawls about the court-yard gate,
Its slime is traced through halls of state,
It breeds in mansions of the great—
I mean great knaves—the Tory.

It is the sloth that feedeth e'er
On Liberty; the Tory.
And stirs not till the tree is bare,
A very stump; the Tory.
'Tis like a maggot in a cheese,
Whene'er it can a rich one seize,
There gorging lies at full length ease,
His laziness; the Tory.

Its head is small, its mouth is wide,
O! very wide, the Tory;
And so elastic is its hide,
'Twould gulp a church; the Tory.
It has a cunning pow'r within,
To turn at will its coat-like skin:
To turn with it's no written sin,
Quite orthodox; the Tory.

But now poor Tory's full of sores;
Sick, very sick, the Tory;
For men are hunting it in scores,
Ay, multitudes; the Tory.
Soon must it bid this land farewell,
Poor thing, first known when Satan fell,
When he began his reign in hell;
Pray, pity for the Tory. A. H.

* The character of this animal cannot offend any: because all Tories are dead. Now Conservatives live; but *they* say that they are *not* Tories.

DISOBEDIENCE AND MISERY—OBEDIENCE AND HAPPINESS. CORN LAWS.

Mr. M'Culloch's Change of Opinion. Destitution in the Highlands and Islands of Scotland. Mode by which America could pay the Twenty Millions she owes the British People.

We live in strange times, and see strange changes operated on the minds of men. In a former paper on the subject of the Corn Laws (see page 40, vol. 1.) we noticed that Mr. M'Culloch, the political economist, had, in the year 1820, calculated the expence of these laws to the nation at *twenty millions a-year;* and we notice now that he applauds the members of the House of Commons for their treatment of Mr. Clay's motion for the repeal of these laws. It is not necessary to recapitulate what took place on that occasion. It will be recollected that the discussion was completely *burked.* Even the greater part of the members termed liberal, were absent on that day of trial, and the constituencies throughout the country would do well to require of their members a reason for deserting their duty at such a moment. Still the motion did not altogether fail of effect. The speech of Mr. Clay was reported and widely circulated through the country, and we cannot doubt but that the seed so well and so ably sown will produce fruit.

But Mr. M'Culloch occupies too important a station at the present juncture to be allowed to play the game of Edmund Burke over again. He is understood to be the *standing counsel of the Bank directors,* and he has been the instructor of a number of those sprigs of aristocracy who have so much to *say* in the management of our national affairs. The present state of the commercial world, as resulting from the management of the Bank, is enough of itself to warn us against placing implicit confidence in his dictum. This circumstance also makes it a matter of charity to himself to give him the hint, that it may be as well for him not to take quite so much responsibility on himself in the present critical position of our affairs. The world has been indebted to him, and may still be more so, for valuable works; but that is no reason for justifying him in violating the common sympathies of nature. He was formerly the advocate of the repeal of the Corn Laws, and now he states that these are beneficial to the advancement of agriculture, and endeavours to persuade those in power, that, in the course of a few years, "this country will be an exporting rather than an importing country, and that the provinces of Munster and Connaught will soon compete with Odessa and Dantzic in the article of Corn in the foreign Market." This is sheer speculation, and requires for its reception a degree of faith, properly termed credulity. Ireland to compete with Poland in the article of Corn. This is possible, to be sure, if the whole population of that populous country shall continue contented to feed upon *roots* and *sea weed;* but we should always keep in mind, that with the improvement of

their political institutions, they must advance in civilization and in comfort; and that, at present, four-fifths of the people scarcely obtain as much of the fruits of the earth, even of the coarsest kind, as to keep them in life. And it is fair to conclude that though, by the improvement of their agriculture, they may produce *more than they now do*, yet all that they can raise will do little more than feed and clothe them as Englishmen are fed and clothed, and no humane man would wish to see them in a worse condition than this. Besides, their population will increase, even according to Mr. M'Culloch's theory, in an *exact proportion with the means of subsistence.*

What, then, can be the meaning of putting forth such statements at the present moment? Has any change of circumstances occurred that should make that law good, which Mr. M'Culloch used to condemn as the most mischievous thing in the country, except an established church? What, above all things, can be the reason why he should now justify what he has so often and so strongly condemned? These are questions, which, like many others, are more easily asked than answered, but they are questions, that every one conversant with the circumstances cannot fail to put to himself. It would be foolish to speak decidedly on the subject, but it is scarcely possible to help surmising that this statement is put forth at the instance of the WHIG PARTY—that the great object is to serve the ministry. No one needs to be told that they, as well as the great majority of the House of Commons, are averse to the repeal of the Corn Laws, and that such a statement from such an authority, would go far to justify their conduct in reference to this important subject. Perhaps the terms on which he holds the editorship of the Courier include some small items of service of this nature; and it is a pity that mankind should be influenced by a patriotism which has such a doubtful shade thrown over it. If either the editor of the Courier, the ministry, or the members of the House of Commons, believe that such statements produce any effect on the sentiments of the public, they deceive themselves, and may, perhaps, discover their error, when it is too late to remedy the evil.

"But," says the editor of the Courier, "Mr. Clay's motion was ill-timed, the nation is content with the Corn Laws as they are; and in these circumstances it would be unwise to alter them." How does this authority discover that the nation is content with these laws as they are? Simply because few petitions have been presented against them; and because the House of Commons has decided in favour of their continuance. It may be that he confounds in his speculations, the House of Commons with the nation. It is common for a certain class of politicians to do so, and it is desirable that some one should point out to them their mistake. We beg to remind them that there are only *one and a half million* of the people that are represented in that house, and that there are *thirteen and a half millions* not represented there. Of this latter portion not half a million will be found in favour of these laws. Besides we must notice, that out of the two millions whom we may

suppose to be partial to their continued existence, the larger half, perhaps, have a special and direct interest in their continuance. In these circumstances we submit it to the judgment of any impartial, unprejudiced, disinterested individual, whether we are to consider one million or thirteen millions of people as constituting the nation?

We might tell the Whigs that the nation is not quite so enamoured with them, as to sacrifice its own interest for their sake. Indeed it is plain to almost every person but themselves, that the nation at large has not that confidence in them which they at one time fully possessed. No enthusiastic effort would now be made in their behalf, and all this not so much on account of what they have left undone, as of what they have done, and the manner in which it has been done. It is easy to see that they are anything but zealous in behalf of the people. All their sympathies are with the aristocracy and against the people. This is sufficiently demonstrative by their conduct on Mr. Clay's motion respecting the Corn Laws.

There are a number of other things, that bear distinctly on this subject, which it would be improper altogether to overlook in the present discussion. Perhaps the most important of these is the Poor Law Amendment Act, which is now again brought under the consideration of the House of Commons. In making this remark, we wish it to be understood that we are neither the abettors of rabid Toryism, nor factious opponents of the present Whig government, but the unflinching advocates of truth and justice; and to overlook the New Poor Law on this question, would be to suppress the former, and violate the latter. It is true, that on the discussion of the Poor Law recently in the House of Commons, when Mr. D. W. Harvey brought into his remarks the *present Corn Laws as affecting the justice of the Poor Law Amendment Act*, that he had few supporters, and that a number of the members roundly accused him of introducing extraneous matter. Nevertheless it is a fact, that the Corn Laws have a very important bearing on the New Poor Law. We are not now enquiring into the comparative merits of the Old and New Poor Laws. We are willing to assume that the latter is an improvement on the former; but we think that it will be universally admitted that relief was much more easily obtained under the old law than it is now under the new law. If this be the case, then is the *enactment of the New Poor Law a gross injustice to the poor without in the first instance repealing the "Bread Tax."* It is a direct infringement of the social compact, founded upon statute and confirmed by usage, and is a melancholy example of the exercise of might over right. It is all to no purpose to plead, that the object sought to be obtained was *the benefitting of the poor.* The parties engaged in promoting it in the first instance, and in proclaiming its virtues now that is in operation, may be very kind, very benevolent, and may mean well; but our objection to the whole procedure respecting it is, that it was *unjust to alter the terms on which relief was to be afforded to the poor, without the repeal of those laws that stand directly in the way of their being able to earn for themselves the means of*

subsistence, and that, too, without ever consulting them on the subject.

We hear a great deal about the excellent working of the New Poor Law. Reports of the guardians of different parishes and unions, addresses to the secretary for the home department, letters of rate-payers from a thousand places, all proclaiming its excellence, and all this founded on the experience of one year; which, for various reasons, we are disposed to consider as little better than no experience at all. We do not dispute that the sums levied on rate-payers have been greatly diminished, nor will we deny that the condition of the poor has been better during the past year than in many preceding years; but we demur both to the *cause* and the *effect*. We deny that the Poor Law is the most efficient cause of the diminution of the rate, and that the better condition of the poor is the effect of the New Poor Laws.

It is to be remembered that the past year has been one of what is generally denominated great prosperity; that there has been abundance of employment in all the manufacturing districts, for all the people that are resident in these districts, and for immense numbers more that have been drawn from other districts, thereby lightening the rates throughout the whole country. In short, it has been a year of an abundant supply of Bank notes, giving great excitement to industry of all kinds; working both the machinery and the animal power of the country to its utmost. In such a state of things it was impossible but that the rates should have decreased, and, at the same time, that the working population should have been both better fed and better clothed. The year, on which we have now entered, is likely to be a better test of the character of the New Poor Law, than the one which is just concluded; and it will give us pleasure to hear at its close, that the poor still continue to be better provided for, and that the rates are not increased again; only we wish the evidence of those who are the receivers as well as of those who are the payers of those rates. But though we were, at the end of the present year, to hear such statements as those above referred to, and that from both parties, still it would not prove that the Corn Laws were either just or politic.

At the present moment, the effects of the Corn Laws are severely felt in various parts of our own country, and we think that the United States of America are, at the time at which we write, in some places suffering in no small degree from their operation; but it is rather out of our way to show how they are producing scarcity abroad. Mankind are naturally more affected by what touches themselves, than with what affects strangers. We therefore turn exclusively to our own country, and it is almost unnecessary to mention, that the HIGHLANDS AND ISLANDS OF SCOTLAND are in a state of destitution, equal to that which exists in many places in Ireland. This, it may be said, is not a consequence of the Corn Laws, but from the failure of the crop of last year. We admit it; but it is equally true that if those, who have subscribed so liberally to supply their wants, had been permitted to turn foreign corn into meal for their subsistence, the *same amount of money might have*

provided for them a full meal, instead of that stinted supply which they now obtain, enough only to prevent death from starvation, which occurring would be an everlasting disgrace to those parties, who have, for selfish purposes, fixed an exorbitant price on the article of bread.

Distress is besides beginning to show itself in the various manufacturing districts of the country. At Manchester alone thousands are already starving; the consequence of what Lord John Russell calls "one of our periodical revolutions of trade for which the government is not responsible, and which it can neither cure nor prevent." What is the worth of a government that can only *exact laws to prevent the people from obtaining bread at the cheapest rate?* Does our government cost so little, that we should be content with it when it declares itself to be capable only of doing the people an injury? Lord John and his coadjutors in the ministry cannot, it seems, prevent these periodical revolutions; but they can so *dovetail their Corn Laws and Currency Laws*, as to insure the recurrence of these periodical revolutions, and their consequent effects—THE STARVATION OF THE PEOPLE. The truth is, that Lord John's statement is pure fudge, and is intended only to gull the people; he knows well, (if not unqualified for his office by not possessing the knowledge which a statesman ought,) the *cause* of these periodical revolutions, and he also knows the *cure;* but he knows also (and here's the rub) that the *aristocracy must give up their plunder* before it can be effected. Would his lordship only be persuaded to try what the repeal of the Corn Laws and cheap bread would do towards relieving the present distress, we would have some hope of him, but we fear he will still continue to foster speculation in silk, cotton, tobacco, or *any other* article, rather than let us have an *abundant supply of corn.* We are well aware that a certain class of political economists will tell him that a repeal of the Corn Laws must, of necessity, *send the gold out of the country.* This is the bugbear that is constantly before the view of their minds, and they speak of it as if *the gold constituted the wealth of the country*, while it does no such thing. It is merely a *convenient medium of exchange,* and MEASURES OUT THE PRODUCE AND MANUFACTURES OF THE COUNTRY in any given quantity. In certain circumstances a small quantity of gold might be wanted, but not in the position in which this country is now placed.

To show this, we need only state that the balance of trade in the case of America is *twenty millions in favour of this country*, that is to say, that America owes to England twenty millions sterling, and before that sum can be paid no small difficulty will be felt here. *Were the Corn Laws repealed* now, or rather, were it not for their existence, we should be *receiving corn in the liquidation of that debt;* not directly from America, for the crop of wheat last year was a failure in that country, but from other countries, which receive from her supplies of cotton and tobacco, especially the latter article: and perhaps it may yet be necessary to import flour directly even from America, before that balance can be paid. Had our ports been open for flour, such a balance would never have accu-

mulated against America,—they would long 'ere this have supplied us with flour in abundance, and many of our large merchants who have been smashed, would have had their debts paid, with something of sterling value, instead of having the day of payment delayed, by promises to pay, in the shape of bills and bank bonds. If our merchants would allow themselves a few hours to reflect on the operation of the Corn Laws, they would see how they are gulled out of their property by the landed aristocracy; but this is not their way of doing business, they will rather be the lickspittles of these cormorants, and dole out occasionally their subscriptions along with them on any case of emergency, than join the poor in demanding a free trade in corn. They may depend upon it they are neither promoting their own interest, nor adding to their reputation by so doing.

We repeat that the Corn Laws, so long as they are permitted to exist, stand directly in the way of our *continued manufacturing prosperity*. At the present moment, instead of sending the gold out of the country, their repeal would give employment to those people that are starving in the manufacturing districts, and would provide bread for them both in this way and by reducing its price. This, however, is a result that we have no reason to expect, and we have only to hope that the commercial distress will open the eyes of our large merchants and manufacturers, to the horrid iniquity of keeping back the wages of the labourer by fraud, and of the special interest they have in seeing justice done to the poor man.

DR. HARRISON'S INFIRMARY.

Sir,—I have read with great pleasure, the suggestion for a penny subscription for Dr. Harrison's Infirmary, and have patiently waited for further particulars in succeeding Numbers; but having been disappointed in my expectation, I beg to offer a few remarks upon the subject.

And in the first place, I would ask, what have the Committee been doing during the past years? I have a report before me, dated July 7th, 1835, in which the Committee call upon the humane to come forward in the support of the Institution; have the Committee neglected their duty, or are the humane so few among the wealthy classes? I think faults are on both sides. The public mind has not been sufficiently directed to the subject, the meetings have not been advertised, or have been held where a working man would scarce obtrude.

I am glad that a penny subscription has been thought of; we shall soon see whether the hearts of the working classes cannot sympathize with their fellow creatures' misery.

I would suggest, that in order to carry out the objects contemplated, boxes should be furnished to those willing to receive subscriptions; furnished either with two different kind of locks, the keys of which to be in the possession of different persons, or,

to save expence, one lock with a sealed paper band round the box, the seal to be kept in the possession of one person, the key in that of another. Each box to have a paper on it, stating the receiver's name, and the object the subscription is intended for; the name of the receivers to be kept by the Committee, and the boxes emptied at stated intevals.

With hearty wishes for the success of the Infirmary and your Periodical,

I beg to subscribe myself

A FRIEND TO THE AFFLICTED.

London.

FINSBURY DISCUSSION SOCIETY, Wednesday, 8th of March, 1837.

The Vice President in the chair.

The minutes of the last Meeting were read and confirmed.

Dr. Maconbray resumed the debate, and founded his argument upon the physical structure of the sexes: maintaining that the female possesses a finer texture than the male: and that the greater the muscular power, generally the less is the mental. Dr. M. argued, that woman had shown herself equal to man. The Muses were represented as women. Minerva, who came from Jupiter to teach mankind, was represented as a female. Aspatia, it is said, prepared the most powerful speech of Pericles. A female succeeded in obtaining prizes against the great Pindar. At later times, the great Catharine of Russia has shown the power of a woman's mind. And, on the whole, Dr. M. concluded, that woman was capable of the highest and most exalted efforts.

Mr. Stephens then commenced his address in the following manner,—My desire that all should have an opportunity of speaking on this bewitching subject, and a hope to hear more observations than I have had opportunity for doing, induced me to second the adjournment, as a *ruse*, whereby the question might have further existence, though I had no wish or intention to take part in it; for my mind has been so much attracted by the claims of each side of the question, that indecision was added to my other natural disadvantages; but I have now, I think, quieted my doubts and confirmed my beliefs,—at all events, a sense of decorum, and respect to the Society, had induced me to give up my not very worthy intention of playing truant, and rather to make a weak effort than a shabby retreat. I repeat I was not, nor am I willing to say anything on this subject, for it has so many *pros* and *cons*, that one has hardly arrived at a possible truth, when an opposite occurs to upset the rationality of the first, which is again in its turn lowered from its temporary pre-eminence by something equally plausible, and perhaps equally ephemeral: and with a mind, which is but in its pupilage, such a multitude of doubts and difficulties, are not at all

calculated to produce decision, or to induce a decision to express *that* which it has not absolutely formed,—an opinion on the subject. I regret very much that I was unhappily absent from the Society when our judicious friend, Mr. E. Thomas, made his opening speech on this question; for, hearing that he maintained the extra-gallant side, I should much like to know what reasons he advanced "for the faith that is in him:" and besides, an opening speech is like a text to a sermon, it gives the cue or key note, and one does not get on comfortably without it. Having missed the manifesto and declaration of Mr. Thomas, I arrived just in time to collect some of the scattered views of Mr. Burn. I take Mr. Burn to be a man of a very righteous intention, with a very good end in view, but in pursuit of this he has blinked the objections, and in endeavouring to prove the wrong the right, he has given some proofs of his benevolence, gallantry, and research, with an equal manifestation of the intellectual Quixote. I make no doubt he wishes to establish what he proclaimed as his belief, and that he pronounced his oration conscientiously to effect this purpose, though so obtuse am I, that I should have been rather converted *from* the side he argued for by his eulogy upon the ladies. He appeared to me to rake up all the odds and ends of authorship among the women to support his argument; and who the majority of the illustrious small fry he enumerated are, I believe none but a kindred spirit with his own will ever be unhappy enough to discover. Who was the profound lady that dialogised with Dr. Johnson, and conquered him in an argument, wherein he had taken the mistaken, the wrong, the bigot's side. Does this prove the lady was equal to Dr. Johnson? certainly not,—not any more than Mr. B's eminent failure on this subject shows him to be a person of a general inefficiency. Let Johnson have the right side, and give the lady the wrong one, and then see if she (as the advocate of an ill-judged opinion with the learned doctor,) would make as respectable a figure? No, no, it was not the lady who conquered the doctor, it was truth which effected his defeat, for most of that which the lady urged was self-evident, or previously produced, and the lady cleverly slew the literary leviathan by weapons which others had placed in her hands. Mr. Burn gave further a catalogue of little witlings, writers of pretty tales, plays, poems, and entertaining histories for children; and it is an undoubted fact, that the respectable ladies he enumerated, were, for persons of very minor pretensions, excellent good in their way, and deserving the approbation, not only of Mr. Burn, but of all who love merit, even when of the humblest character: but shall we compare their pleasant milk for babes to the strong meat for men placed before us by men? Mr. B. went into raptures on account of Mrs. Somerville, and sundry others; lauding them as proofs that women are authorially equal to the males; his enthusiam on this subject is like most ultra-enthusiams, unobservant and unreflective; or he must have a graduated scale of admiration and delight, so that if his esteem for Mrs. Somerville's praiseworthy power of adaptation and compilation carry him so far, I suppose when he comes to speak of the

originals whence she drew her books, the Galileo, Copernicus, Newton, Herschal, and La Place, his admiration will know no bounds. Mr. Burn advocates female equality, a very nice thing to talk about, but let him ask himself this question: Suppose Mr. B. a surgeon, and he were, in the hey-day and jollity of his blood, to go a wooing some sweet girl, replete with all the graces kind nature has heaped upon the gentler and more generous sex; one with a nice, modest, retired nature, simple and refined; suppose he gains her good opinion, and afterwards her affection, and in the sequel, wishing to make her equal with himself, he enters upon a delicate surgical enquiry, for her especial information, making known to her all the secrets of anatomy; and so, from a silly wish to bring about that which the Maker never intended, breaks down the barrier that defends the female nature from the contamination of coarseness, and by a rude influx of masculine information, crushes and overwhelms nearly all that renders the female existence so beautiful and so desirable; would he feel that same degree of tender regard for the forward adept surgeoness as he entertained for the blushing child of graceful simpleness? How would Mr. B. like his wife to perform the part of a bum-bailiff, or that of a dustman, or a hooting boatswain? How would he like her to lecture on scrofula? Would he felicitate himself upon her exhibiting as a first dissector in an anatomical school? Would he like her to stand up in a law court, and prostitute her intellect in defence of wrong, and gabble and wrangle like some mercenary creatures of the moral-defying law? Would he desires he should have to govern the rude spirits of the Eton and Harrow boys? Would he like her to castigate them for their offences, and lacerate their backs, [or other parts, nameless, still punished at the public schools. Ed.] according to the present established custom of school government? And when could he hope to see her produce a painting such as Raphael's, a poem such as Milton's, a system equal to Copernicus's, a history like Gibbon's, or essays like Hume's?—women intellectually on a par with men!—Mr. Brown observed, that he thought the female philosophers of France had a chief hand in bringing about the great revolution, and from this inferred their intellectual power. The basis of this argument is fallacious: in the first place, who were the female philosophers who produced that great convulsion? Where are their liberty-nourishing productions? Where are their philosophical denouncements of kingcraft, and other proofs of their gigantic performance? The heart-stirring eloquence of *Rousseau* remains; the searching spirit of the keen-sighted *Voltaire* exists in his works, to show what he thought and what he dared to recommend; there are the writings of the liberty-lover, *Diderot*, and his illustrious friend the virtuous D'Alembert; there are others, such as Baron Grimm, Baron D'Holbach, Du Marsais, Marmontel, and many other men of mind, who laboured earnestly to bring about the dawn of liberty; who discoursed, amidst surrounding dangers, of freedom's hundred charms. They did not say that for the French people to be free and happy they must revolutionize the govenment, and put away their king. They did not point out the minutiæ of

such proceedings; but they laid the great basis, the foundation of the love of freedom, and lighted up the first bright flame of liberty; they were the true precursors and heralds of emancipation, while Mirabeau, Brissot, La Fayette, formed in their school, espying the excellence of their works, risked all to bring about that revolution, which the women afterwards, by the benign influence they possess over men, gained them many helpers. The women did not bring about the revolution, but strenuously forwarded it when once set in motion; they were the music which sounded for recruits; they were, as women generally are, true friends to the good and virtuous; they saw and approved what had been so righteously commenced, and for a time judiciously continued, and they laid out their whole power of attraction and persuasion to induce men to join their efforts towards liberating their country. There is no proof extant that the women of this period were great minded, beyond the fact of approving, and supporting, the advice and practice of the truly illustrious of their age. Admiration for great thoughts or actions necessarily shows a kindred spirit, but it does not require or imply an equality of power or capacity with the admired; for were this the case, how few hearts would beat with exultation when the names of Hampden, Sydney, and others are pronounced: how few would love the magic of the poet's art and his productions: how few would dwell with rapture on the painter's noble works. This is well apparent from the instance of that gem of womanly superiority, *Madame Roland*, who was the only especially prominent female *philosopher* of that period, and she, as far as woman can do, certainly deserved that name; she was an active friend to the republicans, and a most efficient one, because she was likewise the friend to virtue; she was their cynosure; she was, to a certain extent, the life and soul of their party; but a man of an average mind with hers, would have remained subaltern, because without those graces and effects which make a secondary capacity go so far in a female: witness the works she wrote and published, they are little beyond sheer common-place, and where they are not trite, they border on the extravagant and rhodomontade: they are never read, and, I dare say, will soon be forgotten; but her fair name, her much deserved reputation, will last as long as the human heart beats for freedom, and so long as the love of virtue and female excellence is cherished on the earth. —Mr. Baker's proof of the weakness of woman, was not very apposite, even opining it to be true; Mr. Baker judged woman weak because they believed in the effects of imagination, fright, &c. during the period of gestation, and that they were frequenters of fortune-tellers; for such a belief is a weakness, if weakness it be, common not only to the ladies, but to their fellows the men; and Boyle, the wise and virtuous Peter Boyle, writes expressly to prove the truth of the origin of this weakness; and M. Voltaire, after consulting many of the most eminent of the faculty in Paris, London, &c. wrote an article in his Philosophical Dictionary, highly favouring this weak opinion, and whatever some people may think of Voltaire's religious, or want of religious, opinions, I believe I am quite safe with all, in quoting him as an authority in a matter of

enquiry and observation in common life: added to this many of our own eminent mediciners have warranted this weakness. Are women weak because they are superstitious? Assuredly not. Weak people are in general superstitious, but superstition is not necessarily attended by general weakness. Look at the *mallet* head of Hobbes of Malmesbury, there is manifest power; look at his writings, there are clearness, strength, and wisdom; yet he believed in witchcraft, ghosts, and spirits; and there are hundreds of cases illustrative of these points, and which might be quoted to show that partial instances do not impeach a character for general strength, and, that, even supposing these two supposed weaknesses were confined to the female race, they by no means prove a general inanity. The fact is, that Mr. Burn and Mr. Baker, who appear generally like the two buckets of a well, when one is up the other is down, and who seem to agree very well in disagreeing, have each of them taken up extreme positions: Mr. Burn is too enthusiastically eulogistical, and Mr. Baker, in pointing out the defects, real or imaginary, of the women, seems almost to have overlooked their excellencies. One word with another of our members, and I have done. I beg to applaud the discretion of Mr. Clarke, who, in a very *do-me-good style*, condemned the practice of satirical allusion, and pitched ridicule and its professors into the pit of reprobation; and then, like most moralists, he flew in the teeth of his own law, showing by practice how little weight he himself attached to his fine prudential maxims. He appeared, happily, unconscious that he was endeavouring to ridicule and satirise those whom he reproved for using ridicule and satire. But I suppose he was like most of us, fond of a fling at another, and somewhat crusty that aught should be flung at him. Let us endeavour to give and take in good part and spirit, for satire is oftentimes the seasoning of discourse, and we all know what maudlin work it is to dine without salt, pepper, and mustard; the art will be to let *satire season*, not *furnish* forth the feast. So far as I have been able to form an opinion on this subject, I am decidedly of opinion that, *intellectually*, women are not fully equal to the males. It is manifest they never yet were so, it is demonstrable they are not so at present, and I believe they will never be so: and I am further of opinion that it is right, and in the course and provision of nature, that they should not be so. There seems to be in all the creatures that boast a being in this world, a direct and distinct difference, and in the nature of this difference we find it invariable that the male is the principal, the acting, the daring, the providing, the ruling being, and the female is, in some measure, subordinate. The God who formed us, made men and women with something, a relative difference bodily and mentally, so that the present relations in which we stand are natural, and formed by his wish, and established by his law, for it would be a sad reflection to think, that one is living in a state of felicity at open variance with the will and provision of one's Maker? Experience assuredly is a guide in this case. "What can we reason, but from what he know?" and *this* experience informs us, that men have been always the producers of

great things, and women, when they do particularly excel, imitate that which others have originated; and I defy any gentleman, who has advocated the equality of minds of man and woman, to produce one single instance of genuine originality among female manifestations in the *greater* works of literature and art, to support the position. I will here follow the suggestion of our friend Mr. Priest, and give up the most forward and prominent of men, and take the second order as a standard, and ask where can the women produce their Hartley, their Pope, and their Herschel? Let any one read the writings of Mrs. Woolstoncroft, and then say, if he can, that she was anything to be named with Hartley: let any man read the sweet warblings of Mrs. Hemans, the real beauties of Miss Mitford, and the greater pretensions of Miss Baillie, and see if the trio would make anything like a substitute for Pope. I think not; for what are they but graceful underwoods in the great forest of literature? There is not the height, the depth, the breadth, the power, the concentration, the nerve of Pope; and Pope, I select, because he was the poet of refinement, and of that class of excellence which more nearly assimilate to the powers manifested by women; and and he is not of first-rate genius, but a sycamore only when compared with the cedar Homer, and the true English oak Shakspeare. I do not think the merit of the whole of our existing female writers in poetry, would ever make up one noble sterling reputation, such as that which Pope enjoys, and will enjoy, as long as the world knows aught of English literature. The several instances of female cleverness, which have been brought forward, are not calculated to establish the end desired by those who have mentioned them; for they are seeking, *by the production of exceptions, to prove a general rule;* and as well might another party set about to prove that all men are as weak as women, because there may be instances cited of men whose intellect has been none of the most flourishing: No one has ever denied, surely, that women are often very clever persons, and that they do things in an excellent style; therefore it is of no purpose to bring forward cases of this sort. The business of the opener, and Mr. Burn, with others of the mistaken order, have to do, is to bring forward proofs that there is reason to believe that women *are* equal to men actually and demonstratively, and from past or present existence. To deny them much merit, as people of mind, would be absurd, nay, mischievously false, for

> "The bleakest rock upon the loneliest heath,
> Feels in its barrenness some touch of spring."

So that it would be bad indeed, and low would they truly be, were women under the general ban of insipidity. I consider the man or woman who would essentially alter the better sex, and make them widely different to what they are at present, would be the capital enemy, the destroyer of the rarest and most perfect of God's creatures, and also an enemy to men by depriving them of such companions as women are at present. Mr. Burn quarrels with the present condition of the ladies, because, forming an exquisite par-

terre, producing flowers of all kinds, yielding the choicest odours and sweetest fragrance, with forms of unmatched beauty, of a tender yielding gracefulness, they are not likewise potent as herbs medicinal, and fit for the rough purposes of our common life. He finds a well-stocked orchard filled with nectarines and peaches, grapes, apricots, oranges, and all delicious fruits, and straight his gall is up because they are not oaks, cedars, elms, birch, ash, and what not: he lights on a rich vein of porphyry and would convert it into granite; he finds a statue formed of the finest Parian marble, and growls because he cannot make it fit for a paving stone; he finds a temple built by the wisest architect, the greatest workman, the universal God, built in his noblest style, of his best materials, and lo! our learned friend would have it slabbered over with prepared masculine compo. The Creator marked out the character of man, and that of woman; prescribed their respective bounds, formed them to live together, and knew the effect of the varied disposition or organization he bestowed upon them; then why should man seek materials to alter what he cannot prove to be wrong, or indirectly tax the proceedings of the Almighty to carry out a whimsy of his own. To attempt making women mentally equal with the men would be doing this; it would be attempting to do away with one of the chief distinctions in the social state; the necessary, the desirable line of demarcation between man and woman. If women are to be made of a like mind and disposition with the men, there might as well have been no characteristic distinctions originally: for if the distinction is useless now, it has been all through *alike* useless; Mr. B's women always have been secondary,—there is no genuine record of a state in which they shared a true equality; therefore it is evident their condition must have been provided of their Maker, and not, as some have argued, the unfair consequence of man's usurpations. To attempt denying our many obligations to the kinder sex, would be not only ungrateful but hopeless; they twine themselves about us, so as to make us feel fully persuaded that life, without the ministering of their angel natures would be comparatively a worthless desert and a blank existence; they are the great blessing of our earthly sojourn, compensating for our many trials, cares, and afflictions. A friend of mine once said eloquently and truly, that he considered the man who could not sometimes lift his heart up in adoration to his Maker, and look with affection in the eyes of a loving wife, and there see his love returned, knew not at all the capability of humanity to enjoy blissful sensations. And while I here stand forth to deny their equality in *one* respect with men, I do profess myself earnestly a true and respectful admirer of them, and their character; that I consider a woman better and more deserving than a man; that virtue of the rarer sort always finds its ultimate and perfection in them; that praise has no words to commend them commensurately to their merits; and, as Mr. Brown very nicely observed, being the latest they assuredly are the best of the creatures God has formed to inhabit and embellish the earth. The true advocate of women will attempt to improve their

condition, and obtain for them extended privileges; he will endeavour to have them differently and more soundly educated; he will endeavour to encourage those dispositions which make them so estimable when they prevail; he should bring forward their gentle trustingness, their firmly affectionate nature, their generous adhesiveness; their patient persevering friendliness, their care and caution in all home affairs; he should preserve their freedom from the gross delights which disfigure man perpetually; he should teach them that they are not equal intellectually to the males, but that a wise and kind God has given them rich stores of sentiment, feeling, and usefulness, which more than countervail the marked out deficiency; and which, if duly cultivated and encouraged, will make them better, sweeter, and more worthy than the other sex; he should lead them to be content with the state assigned them by their Maker, rather than fill their heads with useless chimeras; and spoil the evenness of their fine spirit with the strain, the wear and tear, of an ill-advised ambition: he should teach them to aim at excellence as far as it is within their power, to render themselves as good and as accomplished as possible, and then their sweet persons, their gentle nature, their pure spirit, and many hundred natural graces and most winning ways, will leave man with his much-boasted intellect in the minority of deservingness. I repeat, therefore, that women are not mentally equal to the men; I mean that women of the first order and capacity are not equal to the first order of men, nor are they in general so strong-minded as men are; but, Sir, they have other recommendations which make them fully equal to the best of us, if not much superior. And for my own part, were I a woman, I would not were it possible become a man, nor would I wish for masculine power, nor masculine intellect, so long as I was blessed with the many charms and excellencies, which distinguish the women more particularly.

Wednesday, March 15th, 1837.—*The President in the chair.*

The minutes of the former Meeting were read and confirmed.

Mr. Thomas then proceeded to reply to the various arguments urged by the preceding speakers.

On the question the vote was taken, and it was decided by a small majority that the female mind is *not* equal to the male.

THE DISTRIBUTION OF WEALTH.

Convinced, as a thinking being must be, that the happiness of man is dependent entirely upon his obedience to the laws of the Creator; and having this conviction strengthened by the illustrative circumstance, that a knowledge of man's civil condition is essential to the manifestation of that obedience, it is with great pleasure that the following Society has been presented to our notice.

POLITICAL ECONOMY SOCIETY:

INSTITUTED FOR THE CULTIVATION AND DIFFUSION OF THE SCIENCE OF POLITICAL ECONOMY.

The Society has principally in view the following

OBJECTS:

1. To obtain a thorough knowledge of the science of political economy.
2. To clear up, as far as practicable, all disputed points, by a comparison of opinions, and of the grounds on which such opinions are based.
3. To test the principles of the science, by a reference to passing occurrences, and by the history and condition of this and other countries.
4. To endeavour to enlarge the sphere of the science by the advancement of new truths, derived from and founded on authenticated facts or propositions previously established.

For the attainment of these objects it is proposed to use the following

MEANS:

1. The formation of a library of political economy and statistics.
2. The communication of original papers and essays.
3. The investigation of all subjects connected with political economy, by means of oral discussions amongst the members.
4. The delivery of lectures.

In order that any reader who may wish to join the Society may know to whom to apply, we publish the names of the provisional Committee.

W. H. Ashurst	New Bridge street, Blackfriars.
H. Chapman	2, Tillotson place, Waterloo bridge.
H. S. Chapman	2, Tillotson place, Waterloo bridge.
J. Crawfurd	27, Wilton crescent.
J. Epps	89, Great Russell street, Bloomsbury.
T. Falconer	Gray's-inn square.
R. Franks	Redcross street.
S. Harrison	4, Cottage green, Camberwell.
A. Mongredien	21, Finsbury square.
E. Mottram	Little Britain.
— Partridge	
F. Place	21, Brompton square.
R. W. Proctor	19, Hatton garden.
E. Rainford	86, High Holborn.
S. Revans	Austin Friars.
D. Tamvaco	7, Blomfield street.
J. Taylor	17, Kent terrace, Regent's park.

CUTTING OFF A RIGHT HAND.

Amureth, the second sultan of the Turks, made a peace with the Christian king of Hungary; the Turk swore it on the Alcoran, the Christian on the Evangelists; Amureth devoted his time to pleasure, with a beautiful Circassian woman in his seraglio, and placed his son Mahomet on the throne, who, holding the reins of government with a feeble hand, gave the king of Hungary a prospect of entering the Turkish dominions, but unwilling to go without a holy sanction, he applies to the pope for his absolution from his oath, and his benediction; which the pope, seeing for the interest of Christianity, readily granted; the Hungarian took the field with two hundred thousand men; the Turks were alarmed, and not having a confidence in Mahomet on the throne, they, by the divan, demanded their sultan Amureth, who feeling the propriety of it, told the divan he would meet them next day, which he did with his mistress; he then asked, which was the man that would not have given up public business for such a companion? on their keeping silence he said, I now let you see I am greater than either of you; and taking her by the hair of her head, and drawing his scimitar, with one stroke he cut off her head; now, says the sultan, to the field. He led on his Turks against the Christians; at the first onset the Turks gave way, which grieving Amureth to the heart, he took out from his breast the parchment on which the king of Hungary had signed the peace, and sticking it on the point of his scimeter, he held it towards heaven with this request,—"Thou crucified Christ! this is the league thy followers have sworn in thy name to maintain; now, if thou art God, which they say thou art, this day vindicate thy honour and mine." The Turks felt themselves inspired, rushed on to the battle, gained a complete victory, and killed the king of Hungary in the field *notwithstanding the pope's benediction.*

The Christian religion has been made a fine trade of. One fellow sits down in St. Peter's chair, with a triple crown, and propagates Christianity with fire and sword: The Christian kings join him, and carry on a holy war to cram Christ down the throats of unbelievers with the point of the sword; but in England the Christian religion flourishes,—what a charming sight to see an archbishop of Canterbury, with his lawn sleeves, and a diamond ring on his finger, displaying the beauties of Christianity: the rich sit comfortably enough; but as the poor, to whom the gospel was to be preached, cannot get near enough to hear so fine a man, I recommend to his grace to invite them to dine with him at Lambeth palace, and after dinner, over a mug of strong beer, to explain those knotty points. It is high time the Messiah was come to teach the judges law, and the bishops gospel. *The Lord himself shall set judgment in the earth.—Extracted from a work published in London in the year* 1798.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

No. 11.] JULY 1, 1837. [Vol. II.

SPINAL DEFORMITIES.

A CRITICAL INQUIRY INTO MR. POTT'S REMARKS ON PALSY OF THE LOWER LIMBS, AND ON THE ACCOMPANYING CURVATURE OF THE SPINE.

To the Editor of the Anthropological Magazine.

Dear Sir,—From the revival of learning in the fifteenth century, until the time of Mr. *Pott*, (who was surgeon to *St. Bartholomew's Hospital* about the middle of the last century,) little notice, by medical writers, had been taken of spinal diseases, although these maladies had formed a source of great profit to empirics. That celebrated surgeon then directed the attention of the profession to this highly interesting subject.

Mr. Pott candidly states, that he adopted the practice of making *artificial sores* near to the exuberant vertebræ, confining his practice to one species, having been told by Dr. Cameron, of Worcester, that Hippocrates had, by the accidental intervention of an ulcer, cured the spinal complaint of a particular patient. This unpremeditated conversation laid the foundation of Mr. Pott's treatment of these complaints with caustic, issues, setons, &c., which obtained such celebrity for more than half a century in England, and I may add over the civilized world.

During the greater portion of that long period, the method of Mr. Pott stood pre-eminent and unrivalled. The continual failures excited no doubt of its superiority over all others. They were imputed by a too confiding and servile faculty to the intractable nature of the ailment, rather than to the true cause, the mistaken notions of the inventor.

A series of disappointments having at length damped the ardour and abated the zeal of its admirers, the practice of late has been gradually losing ground, yet as many miserable beings are still subjected to grievous and unavailing torture, I am desirous, out of respect for its author, to sift the question more narrowly than its own intrinsic merits appear to deserve. Although Mr. Pott expressly observes, that he introduced the practice from a mere hint of Dr. Cameron's, it is a circumstance not to be overlooked, that Hippocrates thought so little of the *cure referred to, that he has*

not once alluded to it in his elaborate article on affections of the spinal column.*

In the third volume of Mr. Pott's works is a tract concerning the curvature of the spine, and some of its consequences.

He begins with a very correct remark, viz. that among the objects of the medical art, there are some in which all its efforts have been found absolutely ineffectual. Thank God, we live long after Mr. Pott, and have the pleasure of seeing that this non-effectiveness is, in a manner, *daily* diminishing, and in none more than in the maladies under present consideration.

He adds, "In such cases any attempts, however hazardous, provided they be *rational*, are justifiable; and certainly that which is not in itself dangerous, and affords the smallest ray of hope, ought to be embraced."

Mr. Pott announces a successful method of treating palsy of the lower limbs, discovered and practised by himself. To describe the symptoms of palsy or paralysis in any part of the body, is unnecessary on the present occasion. *Loss of the power of voluntary motion* will suffice.

This form of the disease he ascribes at once to a morbid state of the spine,† though the exciting cause may not be discovered, and many facts and circumstances in the sufferer's recent history are called to mind, such as violent exertion, blows, falls, and the like, which have nothing to do with the case, unless *indirectly*, when causing injury to the vertebral column.

He remarks, "While the curvature of the spine remains undiscovered, or unattended to, the case is generally supposed to be nervous," (and in fact so it is, but in a different sense of the word from that alluded to by Mr. Pott,) "and medicines so called are most frequently prescribed, together with warm liniments, embrocations, and blisters, to the parts affected; but, when the true cause is known, recourse is always had to steel stays, the swing, the screw-chair, and other pieces of machinery, in order to restore the spine to its true and natural figure; but all, as far as I have observed, to no one real or permanent good purpose: the patient becomes unhealthy, and, languishing for some time under a variety of complaints, dies in an exhausted emaciated state; or, what is still worse, drags on a miserable existence, confined to a great chair, or bed, totally deprived of the power of locomotion, and useless both to himself and others."

In all which has been now quoted I fully concur; the picture drawn by Mr. Pott is but too accurate. Still, however, I must dissent from him upon certain points, now to be noticed. I shall quote further his own words.

First he observes, "I had never seen this paralytic effect on the legs from a mal-formation of the spine, however crooked such mal-formation might have rendered it; or whether such crookedness had been from time of birth, or had come on, at any time afterwards, during infancy.

---

* See Hippocrates de Articulis. † Vol. iii. p. 457.

Second, "That none of those strange twists and deviations, (which the majority of European women get in their shapes, from the very absurd custom of dressing them in stays during their infancy, and which puts them into all directions but the right,) ever caused anything of this kind, however great the deformity might be.

Third, "That the curvature of the spine, which is accompanied by this affection of the limbs, (whatever may be its degree or extent,) is at first almost the same; that is, it is always from within outward, and seldom or never to either side.

Fourth, "That since I had been particularly attentive to the disorders, I had remarked, that neither *the degree nor the extent of the curve* made any alteration in the nature or degree of the symptoms at first, nor for some time after the appearance; or, (in other words) that the smallest curvature, in which only two or three of the vertebræ were concerned, was always at first attended by the same symptoms as the largest.

Fifth, "That, although it sometimes happened that a smart blow, or a violent strain, had immediately preceded the appearance of the curve, and might be supposed to have given rise to it, yet, in many more adults, it happened, that no such cause was fairly assignable; and that they began to stoop, and to falter in their walking, before they thought at all of their back, or of any violence offered to it.

Sixth, "That exactly the same symptoms are found in infants and young children, who have not exerted themselves or been injured by others, as in the adult, who has strained himself, or received a blow; and that the case was still the same in those grown people, who have neither done nor suffered any act of violence.

Seventh, "That although it must be allowed, that *a dislocation of any of the vertebræ would, most probably, be attended with the same kind of symptoms, from the pressure it must make upon the spinal marrow;* yet it is also most probable, that such symptoms would be *immediate*, and attended with great pain in the part, neither of which is in general the case here."

There is candour in the admission made by Mr. Pott, in the last portion of the quotation, with reference to LUXATIONS; and were Mr. Pott my contemporary, I should expect that he would carry his admissions farther, and be among the first to accept the boon which later intelligence and experience have enabled us to offer.

However—truth is truth, and must be sifted; this, rivals in matters of opinion, and even determined opposers of doctrines and theories, can easily do, without degrading themselves by descending to scurrility or personal abuse, inuendoes, and expressions of a disrespectful nature. And now let me press upon the reader's mind an *ethical* lesson, which lessons are commonly more efficient, and dwell longer on the memory, when given in connexion with matters of fact. I have been, for several years, a mark for professional malevolence: sorry, indeed, am I to be under the necessity of so saying, because it imposes upon me the disagreeable task of

complaining. But the lesson which I wish to draw from the above is this, into whatever controversy it may be judged necessary to enter, let the language and deportment be deferential to the opponent, by which the strength of the arguments will be increased, and it will obtain the good, the *golden*, opinion of all sorts of sensible and respectable men. Scurrility among medical men is the greatest of all abominations. If we use it we disgrace and degrade ourselves: we can do without it; stout and cogent arguments do not require the aid of vituperation to convince those who choose to look into the matter as to which party is in the right.

But to return: Mr. Pott admits that curvature in the spine is a frequent cause of paralysis. So do I, and so do many others, who have attended to the subject of spinal diseases. But when he relates a case, we have a right to connect the facts with the inferences. He tells us, (much to his praise) that, from certain circumstances which had been communicated to him, he was resolved to investigate the subject, in a practical manner—which is certainly the best way of proceeding in such circumstances.

We are accordingly informed, that the first opportunity which occurred to him was the case of an infant, in which the curvature was "in the middle of the neck," and the use of whose legs had been lost for several months. To remedy all this, a pea issue was established near the seat of the deformity. Proper attention does not appear to have been paid to his directions, (as among the vulgar they never are, if the medical attendant be so much engaged in practice, as not to have time to watch his own proceedings), and although we are told that after two or three weeks "the child was manifestly better," it happened to catch the small pox, and died.

Upon examining the state of the part deformed, after death, it was pronounced, that the bodies of the vertebræ concerned in the curve, were longer than they should be, and than those above and below were: &c.

As this is a positively asserted fact, we must receive it as Mr. Pott has stated it; but how these vertebræ obtained their augmentation of size, Mr. Pott does not state.

As the opinions of Mr. Pott have give rise to so many differences among medical men, I shall recite the next case which he relates: "My next patient," says he, "was a tall thin man, about thirty-five years old, who thought he had hurt himself by lifting a heavy weight; his legs and thighs were cold, and what he called nummy, but not absolutely useless: he could with difficulty go about the room with the help of a pair of crutches, but he could neither rise from his chair, nor get on his crutches, without the assistance of another person, nor could he without them walk at all.

"I made a seton on each side of the curve in his back, about the middle; and having given his wife directions how to dress them, I called on him once in three or four days. At the end of six weeks, he had recovered the due degree of sensation in his limbs, and found much less necessity for the use of his crutches; he could rise from his bed, and from his chair, without assistance, and by means of one crutch and an under hand stick, could walk

for an hour or more without resting, and without fatigue. The setons had now, from not having been properly managed, worn their way out, and I would have converted each of them into an issue, but, as neither the patient nor his wife had ever believed that the discharge had any share in his amendment, but, on the contrary, that he would have been better without it, he would not submit to what I proposed, and I left him. At the distance of three weeks from the time of my leaving him, I met him walking in the street very stoutly, with a common cane, of which he made little or no use. I asked him what he had done? He told me that the sores had continued to discharge, till within a few days; but that he had drank a great deal of comfrey root tea, with isinglass, and he supposed that had cured him."

But, because this ignorant man ascribed his cure to a very improbable cause, comfrey tea and isinglass being about as likely to effect it as chalk and water, Mr. Pott came, in a very illogical manner, to the conclusion, that his setons must have in reality brought about the desideratum.

Admitting the preceding facts to be correctly stated, the inferences are not borne out by the premises. The back, on receiving a sudden twist or jirk, often becomes extremely painful, and the patient remains for a time completely helpless. The irritation gradually abates, and, in a few days, with rest alone, the parts recover their former capabilities. That this change would have taken place in the present instance, as well without the pea issue as with it, is, I think, highly probable, had quietude been strictly observed, and perhaps a few leeches promptly applied to the injured spot. Similar cases have occurred in my practice. The following has been only a few days cured. Miss ——, aged nineteen, of a puny and delicate frame, while drawing the strings of her petticoat very tight, suddenly wrenched her loins, and immediately suffered the most agonizing torture in them. The pain continued very severe, and shot from the part to the left side of her face. Her lower limbs were also paralytic, and very painful. In this distressing situation she continued through the remainder of the day, and all the following night. Next morning she was considerably easier, and when I saw her on the third day after the accident, the limbs had nearly recovered their former activity. She could move them with ease but they felt debilitated. The pain and tenderness on the side of her head and face were quite gone. By examination, I found all the vertebræ of the spinal column in their natural places. On pressing the lumbar spine, whence the agonizing torture proceeded, I discovered slight remaining tenderness in the part. By the application of cold lotions for a few days every vestige was removed. I recommended recumbency to be continued a month longer in order to restore tone to the injured parts. When the ligaments have been forcibly stretched, unless time be allowed for them to recover their healthy tone, they will gradually elongate, and thus lay the foundation of spinal deformities. So many examples have occurred in my own practice, that I am con-

vinced twists and wrenches are among the chief causes of spinal deformities.

I need not be now particular in explaining, that the spinal column consists of *bony* structure; and that curvature must inevitably arise from some displacement, or luxation of the individual bones, of which that column is composed: therefore, if the disease lay in the vertebræ, of what use could it be to apply the remedy to parts of a different structure? We know that many disorders may take place in soft parts, closely approximated to bones in every situation in the living system; while, at the same time, if disease actually exists in the bones, such as caries, or necrosis, we must find our way to its seat, otherwise any attempt at cure would be not only vain but absurd.

Mr. Pott further relates a case, while still under his care in St. Bartholomew's Hospital. He describes the deformity as being of the most extensive description, the whole dorsal vertebræ having "*universally and gradually given way;* the patient was so absolutely incapable of motion, that he could neither turn himself nor sit up in his bed: his feet were pointed downwards, and his ancles so stiff, that when he was held up under the arms, the extremities of his great toe touched the floor, nor could his feet be brought flat to the ground by any means or force whatever."

In this state the patient had been more than a year, but after the expiration of three months trial of caustics, Mr. Pott informs us, that he was "free from most of his *general* complaints, had the most perfect use of his legs, *while in bed*," and an *imperfect* use of them in attempting to walk. In consequence of these favourable occurrences, he predicts perfect recovery, though he admits the continued existence of deformity.

As we have not been favoured with the conclusion of this case, the success of Mr. Pott's treatment remains unknown. Why was it left unfinished? The result, whatever it might be, should, I think, have been related, in some of the following editions of his work, either by the author, or his highly respectable successor and son-in-law, Sir James Earle.

The last thing to be noticed is Mr. Pott's PLAN OF TREATMENT. He seems to make a light and simple matter of it, evidently because both his pathognomic ideas and his curvature means were nothing more than a guess or conjecture. I shall again quote his own words. "The remedy," says he, for "this most dreadful disease, consists *merely* (mark the word) in procuring a large discharge of matter by suppuration, from underneath the membrana adiposa on each side of the curvature, and in maintaining such discharge until the patient shall have perfectly recovered the use of his legs." He then proceeds to describe the various methods by which he procures this discharge, such as *setons*, issues made in a variety of ways. He prefers issues by caustic, and says, in pertinent though by no means elegant language, that *a seton is a nasty thing*. In the management of his caustic issues, he remarks, that at intervals of a few days, he sprinkles the sores with *finely powdered*

cantharides, thereby adding to the original pain of the caustic the Spanish fly, in the form of a perpetual blister.

Again, he says that "the discharge by means of an issue, is all that is requisite for a cure; which is true."

This is his own declaration. Supposing it were true, our curative means would be very simple, and easily learned. I say, the doctrine is *not true;* and I say so without at all calling the veracity of Mr. Pott in question; but I have considered it the more necessary to make the remarks which I have made, because inexperienced persons are apt to be led astray by the imposing authority of great names. It is only necessary to look at the numerous models taken from life, and the mis-shapen back-bones deposited in the museums, to be convinced that Mr. Pott's doctrines and curative indications are equally severe and inefficient.

The generality of deformed spines display no marks of structural mischief anywhere. They are sound, and what is more, have never been organically deranged. Since then, Mr. Pott's opinions and practice turn upon this single pivot, both are clearly erroneous, and will, I trust, be *soon banished from the healing art.**

Admitting, for the sake of argument, that Mr. Pott's doctrine is well founded, I am, nevertheless, unable to perceive the good effects likely to arise from adopting his practice. According to him, the vertebræ are, in such instances, extruded and carious. His object was to counteract the mischief by producing some other change in their mode of action.

Let us suppose his efforts to be successful, what *becomes of the purulency or carious matter already formed, and in contact with the ulcerated vertebræ?* Is it absorbed and carried into the constitution, as some have asserted? Such a supposition is at variance with the established laws of the animal economy. And even if we are prepared to admit that bland pus may, under favourable circumstances, be absorbed, does it follow that a fluid, of which dissolved bone forms a constituent, is ever absorbed? I know of no well authenticated instance of the kind, and, therefore, do not hesitate to declare, that the notions of Mr. Pott are ill founded.

Whenever either he, or any of his followers, have succeeded in giving relief, it *was owing to the accompanying rest, and never to the torturing methods employed.*

I have entered more fully into the doctrines and the practice of Mr. Pott, than they perhaps deserve, out of respect to the author, and because they are, I am sorry to add, still followed by influential practitioners, both in the capital and the provinces.†

The French Medical Gazette for August 1835, Nos. 34 and 35, contains a memoir by M. Nichet, of La Charitie, at Lyons, on the nature and treatment of Pott's disease. It consists, he says, of a curvature in some of the vertebræ, and is produced by a scrofulous

---

* For a refutation of Mr. Pott's opinions, see the engravings.

† Engravings of distorted spines are in preparation for the Magazine, which will prove that very extravagant deformities of this influential organ can exist without any structural mischief in it.

tubercle in the column or its dependencies. The tubercle varies in size from a pea to a nut, and is a whitish, yellow, or grey mass. It may be formed in any part of the spine, but appears most commonly in the dorsal region, attacking and destroying the bodies of the vertebræ, the plates, or the spinous and transverse processes. This tuberculous body is frequently deposited in the intervertebral cartilages. Its first effect is to produce loss of bone, and to form a cavity for its reception. The author has never seen *either tumefaction, or softening, or caries of the vertebræ, so often mentioned by Pott and others. The bony matter seems to have been removed, as it were by a file.* The new bones, for the tubercle gives rise oftentimes to new formation, looks like ivory. In caries of all other parts, the bone furnishes a liquid resembling wine lees in colour, is soft, and gives out a dull heavy sound. As nothing of this kind shows itself in the spinal column, Mr. Pott's notion of caries is visionary and unfounded.

Pott's disease is susceptible of many complications. The most frequent are pulmonary tubercles, which are found in nine-tenths of the autopsies. The greater number of persons afflicted with Pott's disease, die through affections of the lungs. Tubercles are also found in most other organs, terminating in what are called cold abscesses. M. Nichet observes, on the examination of deformed spines, the continuity is found to be interrupted on the outside of the bend, and *no attempt is ever made there at reunion*, by what is called anchylosis. Such are the observations of this writer.

The advantages of repose and position were violently opposed in this country, until I enforced the benefits arising from them both by precept and example.* They are now, after a long and violent struggle, admitted to be highly beneficial, except by the old bigots and the muscularians, who must soon be obliged to yield to the force of truth.

The cause of the superiority of rest is become too evident to require much elucidation. The motion and weight of the erect body crushes down the displaced bones, and the undue pressure upon them encourages their erasion or absorption.

The nerves become irritated, and thus produce interminable pains, induce paralysis, and promote the formation of abscesses in the soft parts. Besides disturbing the functions, they, by their continual pressure, encourage structural mischief among the viscera. Such are the statements of M. Nichet. They are in accordance with my own declared opinions of Mr. Pott's doctrine. I, however, entirely dissent from M. Nichet, in respect to his notion of tubercles in the spine. I deny their existence until better evidence is produced, and therefore do not think it at all necessary to enter further into any controversy with him on the subject.

I am, dear Sir, your's truly,

E. HARRISON.

Holles Street.

---

* See my pathological and practical observations on spinal complaints; my letter to Sir B. Brodie, &c. &c.

EXTRACTS FROM A LECTURE ON THE ORGAN OF VENERATION,

Delivered at Windsor in the Month of May, 1837, *by* Dr. Epps.

By the *position* of the organ of veneration, one most important truth is established, namely, that all the other organs, which are placed below it, *should act through it.* They all join in physical manifestation in raising it: they, as it were, carry it upraised: saying by their act, Behold our king; behold the head, the ruler of us all. They agree, as it were, in presenting this as the key-stone in the arch: making it form the central and uppermost point of the head. The direction of all the other organs is towards this.

Such a relative position of this organ, in respect to other organs, justifies the maintenance of the opinion, that no organ obtains its proper gratification, or the exalted state of happiness to be derived from its activity, unless it acts *through veneration:* that is, unless the devotional feeling is superadded to the animal or moral feeling, or intellectual operation.

Why do we give thanks to God at our meals? Why at public dinners do we have *Non nobis Domine?* Why we want to superadd the devotional feeling. It may be said that this offering of thanks is an institution, or, at least, a result of christianity. Oh no! this is not the case: for Homer proves that it was a custom, before sitting down to a feast, to offer to the Gods. Homer says:

> "The first fat offerings to the immortals due,
> Amidst the greedy flames Patroclus threw."

This, then, is an activity of veneration, demonstrating, that, for man to manifest happily his organization, he must, even in eating, combine with it the devotional feeling: that is, "whether we eat or drink, do all to the glory of God."

Why do the despots of the earth, when they commence their unhallowed wars against the liberties of mankind, have solemn prayers uttered and hymns chaunted in their places for worship, praying for success? And when they have succeeded in crushing the efforts of a people, who wished to walk forth in the dignity of their manhood, clothed with freedom, and ornamented with liberty, why do they offer up thanks to the god of battles? Why? because bad as they are, they feel the necessity of adding to these acts the sanction of the devotional feeling.

It must, therefore, be maintained, that man cannot be happy unless, in the exercise of every organ, he combines with its activity the activity of the organ of veneration; and that Phrenology establishes this by physical demonstration, because the organ of veneration occupies a position in the head the highest and the most central.

Though the above opinion is maintained, namely, that every organ should be active through the organ of veneration, it is not

maintained that the organ of veneration can be called beneficially or properly into activity through *any one* organ.

Indeed, the activity of veneration, when exerted through any individual organ simply, may be, and has been, productive of the most distressing results. We shall notice some activities thus induced, because we are bound to consider that the proper exercise of veneration being the source of our purest and highest enjoyments, and, through them of the highest elevation of character, we must necessarily suffer much when veneration is improperly called into activity.

Veneration may be called into activity through any organ. Have we not read in history that spotless virginity has sacrificed her virtue at the shrine of the goddess Venus: and why? Because she thought it was an act of worship. What were the Saturnalia and Bacchanalia of old? What but the unregulated addition of the devotional feeling to the appetites of hunger, thirst, and other passions. But to come nearer home.

There is one organ which is particularly operative in inducing the activity of veneration, and that is the organ of TUNE. This organ delights in *musical* sounds, and is enabled to produce influences on the mind by calling the brain into activity. Let any person go on parade, and hear a *martial air*, and will not he feel the desire to march and fight? Does he not feel the vision passing before him of rising on some citadel, having, perhaps, his arm cut off, and yet holding the standard with the other, and shouting, on reaching the turret's top, "Victory, victory?" Why do these visions pass before the youthful mind when martial music is played? Why is the game of kings, which, if people were wise (says the poet) kings would not play at, namely, WAR, always played at with music? The answer is, music excites destructiveness and combativeness, and men will march to be shot at and to be bayoneted, who would not do such things if they were not excited.

Cannot tune be rendered active in reference to the organ of veneration, as it is in reference to the organs of combativeness and destructiveness? It is, unfortunately, every day. Thus, whenever a Roman catholic chapel opens* what a splendid exhibition of musical talent there is: the first singers from the theatre are obtained to pour forth strains of melody: and for what, but to excite the devotional feelings, to bring veneration into activity; and what beautiful music they have always at the worship of that persuasion. Now what is this for? Is it to enlighten the intellect, and to develop that true worship which consists in the worshipping with the spirit and the truth? It cannot be, because the greatest part of these chantings are in *Latin*, which cannot be understood by the mass. The organ of veneration is thus brought into

* *Advertisement in the True Sun, February* 4, 1836.—Catholic Chapel, London Road, Southwark. On Sunday next, the 7th inst. a Sermon will be preached at the above Chapel by the Very Reverend Dr. Wiseman, President of the English College at Rome, for the support of the Schools for educating the poor Catholic Children of Southwark. *Music: Mozart No.* 12. Service to commence at Eleven o'clock precisely.

activity, and a blind devotion is generated: a devotion very little better in its character than that which is felt by the poor idolater, who bows down before a stock of wood or stone at the sound of the gong-shell, or any other musical instrument.

But this means of exciting veneration is not confined to the Romish church: it prevails in the church of England, in the church of Scotland, among the intelligent independents, the grave Wesleyans, the simple-minded baptist: modified more or less in each.

Look at the cathedral service of the church of England. What are the *choristers* for? Why we condemn our Roman catholic brethren for these things, and yet we do the same things. Will any one say that the mockery presented in the rapidity with which the services are gone through, in our cathedrals, is at all the manifestation of that devotional feeling which consists in worshipping God in spirit and in truth? What is quite common now in our streets? Why we see every day, placarded on the walls of the metropolis, the lord bishop of this or that will preach a charity sermon; and then at the bottom of the bill, in large letters, Mr. so and so, a musician of note, will play the organ, or will conduct the music on the occasion. Now what is this but telling the people you shall have your organ of tune pleased, if you come to see us next Sunday. It is related that a celebrated episcopal minister, who has opened an episcopal church in London, upon the *voluntary* principle, has employed twenty white choral boys, to form part of the religious services to be preached there; and also, will it be believed, the pew-openers have white sleeves; and this very person is one of the most violent denouncers of the worship of the Romish church: he himself engrafting on his own, *of his own accord*, one of the various means that the Romish church has devised to produce blind devotion: to realize the dogma, that ignorance is the mother of devotion.

To show still more fully the operation of the organ of tune as calling into activity the organ of veneration, the following statement from a newspaper is worthy of record.

"Easter Sunday, being a great festival in the church of Rome, the high mass of yesterday was celebrated in the catholic chapel of St. Patrick, Soho-square, with more than usual splendour and solemnity. The habiliments of the officiating clergymen were beautiful and gorgeous, and a profusion of lights and ornaments decked out the altar. The chapel was crowded in every part, and from the manners and gestures of many of those present, I conclude the attendance of strangers was very large. The great feature in the morning service, however, was the extraordinary, and almost superhuman, effect of the music of Mozart's 'Mass,' No. 12, performed by the choir of the chapel, in conjunction with some forty or fifty of the instrumental and vocal artists of the Opera. To attempt a description of the sublime and soul-stirring passages of the 'Gloria in Excelsis,' and the 'Credo,' as given by the choir of yesterday, would be impossible—the effect appeared almost magical upon the minds of the hearers, as well catholics as protestants—the forte and chorus parts being absolutely electrical. To a stranger

who had not before heard a mass of Mozart's, the epithet 'divine,' applied to this wonderful composer, will seem most just—and those only who have heard the full band of yesterday in the 'bursts' and 'piano' parts of the grand composition, No. 12, can have an adequate idea of HOW MUCH MUSIC CAN ACCOMPLISH IN MOULDING THE DISPOSITION OF THE HEARER TO RECEIVE RELIGIOUS IMPRESSIONS. DOUBTLESS THERE IS GREAT DANGER IN ATTENDING UPON THOSE SOLEMN OCCASIONS OF OBSERVANCES OF THE CHURCH OF ROME.

"Mr. Kalkin led the choir most efficiently, and Mr. Last presided at the organ. The lady (Miss Conolly, I think) sung the treble and solo parts very sweetly. Mr. Jones, who is known as a public singer, acted as director. The instrumentation was most admirable, and adds to the well deserved reputation of the gentlemen of the Opera.

"Having said so much of the music, it is but justice to say that a very able discourse was delivered from the pulpit, by one of the rev. gentlemen of the chapel (Mr. Long), on the text, 'He is risen.'" —*True Sun of Monday, April* 20, 1835.

But the organ of veneration can be called into activity by other organs. Thus the organ of form, order, wonder, are perpetually used by cunning men to excite in the minds of the people the devotional feeling.

Any one who has been to a catholic chapel on a day when a grand mass is to be performed, or, even upon any Sunday, will have seen the operation of these organs, in and upon the organ of veneration.

Look at the gorgeous splendour of the altar piece; look at the crucifix and the splendour investing it; look at the long wax tapers glimmering in a softened light; look at the gorgeous dresses of the priest; behold the incense rising; hear the bells ringing; see the robed attendants and all the other officials; and then perceive the effect upon and in connection with the organ of veneration: and then it will be seen that a blind devotional feeling is induced; and therein the evils of the Romish system, as tending to substitute by its forms a spurious devotional feeling, for that true devotional feeling, which consists in the worshipping in spirit and in truth, will be apparent.

But the Romish worshipper is not the only one who does this. There are many who think themselves much in advance of their Romish brothers, who do, to a certain extent, the same. What mean the white robes and the black robes that are worn by the episcopal clergy? what mean the ribands that hang on the back of the doctor in divinity? what mean the lawn sleeves of the bishop? what means the mitre? what means the little apron that the bishop wears before him?

Protestants, who take the scriptures as their guide, should cast aside these things: unless it may be proved that the cloak, that Paul left at Troas, was a lawn-sleeved dress. As phrenologists we must cast aside these things, because we know that through them the organ of veneration is excited improperly.

But the dissenting minister has recourse to these means of exciting the organ of veneration. How many of them, who profess to feel the sincerest regret for the formalities of the established sect, imitate them in putting on the *surplices*, and wearing two little pieces of white cloth dangling from their neckerchiefs, and being called reverends.

There is almost an infinity of means by which veneration is called into activity. What are the TITLES of reverend, right reverend, very reverend, the right reverend the lord bishop, his grace the archbishop, his holiness the pope. I say, what are these titles but means of awakening towards certain *men*, not towards the *truths* or the *errors* they may teach, the organ of veneration.

In fact, priestcraft has been busy in all ages in advancing itself, by inducing a diseased activity of the organ of veneration; and it is lamentable to turn over the pages of history, and observe the miseries which have been produced by the desire of priests to exalt themselves, by inducing towards themselves what alone should have been induced towards the truths they professed to promulgate.

But there are still other means by which veneration may be called into activity; of these, one is mere *muscular exertion*, occasioning an *increased circulation of the blood*, which augmenting the *activity of the brain*, and more particularly the activity of veneration, induces strong devotional extacies. This is exhibited among the Jumpers and Ranters, who, by their violent muscular efforts, induce this activity of the brain, and thus generate a spurious excitement, under which they manifest a savageness of devotional feeling, quite contrary to the influences of that spirit, which is pure, gentle, full of meekness, and of good fruits.

There is another mode of exciting veneration, and although it is of a more etherial nature, it is equally injurious. I refer to the method adopted by the followers of Edward Irving. These individuals, believing that the church has a right to expect the realization of the same peculiar gifts, which she enjoyed *before the Scriptures were completed;* before the whole of the moral will of God was made known to man; have engaged themselves in prayer at six every morning and again every evening, to beg of God to shower down these blessings. This state of expectation brings on an increased activity of the organs of wonder, veneration, and hope: and at length the devotional feeling attains such a degree of activity, that the excited one breaks out into utterances of a most peculiar nature, which they venture to compare with the supernatural gift of tongues, which we read of in the New Testament, as possessed by the early christians.

The following circumstance occurred to myself. Happening one day to call upon a friend, Mr. Rait, of Fore Street, respecting some political subject, I think it was the Reform Bill, I conversed with my friend on the subject, and while conversing, a person present in the warehouse, but who had not been introduced to me, observed "sign of the times, sign of the times," or something to this effect. I expressed my astonishment at this remark, more

particularly as I had not had the pleasure of being introduced to him; and that I presumed he was a follower of Mr. Irving, and that he was influenced by some power of excitation similar to that which occasions the utterances in the unknown tongue. I had hardly finished my sentence, when drawing his lips into a narrowed circle, and inflating his cheeks, he blew out with a supernatural kind of scream, "beware—beware—beware:" his countenance turning a livid red from the great force he used: he adding, "you cannot look me in the face, and say, that your conscience does not condemn you for having sinned against the Holy Ghost." I told him that I was in the habit of looking many mad people in the face, but that certainly I had greater difficulty in looking him in the face than I had felt with any mad person: and I warned him, that if he continued to exhibit such states of mind, he would soon be lodged in Bedlam. Now what was this manifestation but the misguided activity of veneration?

These excited persons use a *three-fold* repetition; an amount of utterance which accords strikingly with that which is necessary to natural relief: indeed these utterances do not exhaust them, and this they think is a sign that they are divine: because they say, that if they were not divine, there would be evident exhaustion. But this burst of ejaculations, for it is little else, relieves the state of the brain induced by the previous conditions.

It is curious that we have an exact counterpart to many of these manifestations recorded in the pages of a heathen writer. Virgil represents Æneas as about to visit the regions below, and he has previously to consult the god Apollo. He applies to the priestess, and the circumstances as transpiring, which the poet records, are strikingly correspondent to those connected with the Irvingitish manifestations.

For further evidences of the coincidence between these manifestations thus described by the poet, and those by the followers of Mr. Irving, for further explanations of the mode by which the organ of veneration has been thus called into activity, I must refer you to the essay on veneration, in a little work entitled Horæ Phrenologicæ.*

Such then are some of the various means by which the devotional feeling can be called into activity; means which are not proper, viewed in relation to the effect produced, or to the channel through which those effects are produced.

We have now to consider what are the *legitimate means* by which this organ may be called into activity. In explaining this, the terms *devotion*, *piety*, and *religion*, will be explained. The term devotion expresses the activity of veneration without any reference to the sources whence it may be called into activity. Drunken men are very often very devotional. Piety is the devotional feeling *in manifestation*, in act, whether properly or

* Horæ Phrenologicæ, being Three Phrenological Essays, on Morality, the best means of obtaining Happiness, and Veneration; price 2s. 6d. E. Palmer & Son, 18, Paternoster Row.

improperly manifested. Now as we have seen that the organ of veneration may, as a part of the brain, be called into activity through almost any organ, a man may have much piety and be a very bad character. Thus the poet Virgil speaks of the pious Æneas: "and he calls him so, notwithstanding he, after being shipwrecked near Carthage, kindly received by Dido, gains her affections, and then deserts her;" and yet he was the pious Æneas, why? because he carried his *lares*, his household gods, away from the flames of Troy. Many most fervent in prayer rob and pillage, during the rest of the week, their neighbours and customers.

What then is *religion?* It is such an activity of veneration that is right: and what is that? It is the activity of veneration, when active in accordance with all the faculties of the human mind, so that the devotional feeling to be properly manifested, must be excited by that which has previously been presented to the moral feelings and the intellectual powers, and which has been approved of by them.

So that it is evident, that nothing ought to be allowed to approach our veneration, *unless it has gone through all the intellectual organs and the moral feelings*, and thence proceeding to the organ of veneration. How soon would all false religions be driven from mankind, if they would thus exercise the organ of veneration. How then we should realize the beauty of what the Saviour of men taught, namely, that the true worshipper is he who worships God with the spirit and the truth. How clearly would it be seen that neither in this mountain, nor in that, shall men worship, but the proper worship place is a contrite humble heart. We can understand why Paul prays for the Ephesians, that God would give unto them the spirit of wisdom and revelation in the knowledge of him: The eyes of their understanding being enlightened.

The phrenologist can further understand why he is called upon to love the Lord with all the heart, and with all the soul, and with all the mind, and with all the strength: that is, he is to make the physical powers of the body, the strength, the organs of the animal feelings, the soul, the organs of the moral feelings, the heart, the organs of the intellectual powers, the mind, to be engaged in inducing the activity of the organ of veneration.

The phrenologist has been charged with being an enemy to religion. Why the doctrines of Phrenology, it must be seen from these statements, establish that *religion is the business of every man's life.* And why? Because man cannot be happy without bringing his organ of veneration into activity. In fact, Phrenology demonstrates that there is a *physical* necessity, that whether we eat, drink, or whatsoever we do, we shall do all to the glory of God, in order to be happy.

Is it not interesting to find, that actually Phrenology presents a physical demonstration of the only proper method of manifesting the devotional feeling: explains what religion is: and demonstrates that it is the highest activity of the human mind: and that he who despises religion as beneath him, despises his own dignity as a human being.

LONDON ANTI-CORN-LAW ASSOCIATION.

Convinced that a supply of food in amount and of a kind suited to keep the body in a state of health, is an essential to the exhibition of the higher order of feelings by society as a body, attempts have been made to awaken the attention of the readers of *The Anthropological Magazine*, by introducing Essays occasionally on the operation of the Corn Laws. Our motto has been, "Man has no right to make dear what God has made cheap." It is with pleasure, therefore, that we communicate the information that a Society has been formed, called the

LONDON ANTI-CORN-LAW ASSOCIATION, FOR PROCURING THE TOTAL REPEAL OF THE CORN-LAWS.

The object of this Association is to open Great Britain to commerce. For a quarter of a century together, the operations of commercial industry were held in check by the existence of a war, undertaken and maintained for objects which, both at the time and since, have been far from obtaining the undivided approbation of the community. And when that war ceased, instead of the commercial and manufacturing classes being allowed to reap the compensation which ought to have arisen from the return of peace, the class to whom the depression of foreign commerce during the war had been a source of gain rather than of suffering, and at whose instigation principally the war had been begun and persisted in, were able to lay an embargo upon foreign commerce, except to the precise extent to which they conceived its permission might turn to the benefit of their monopoly.

If there existed a rock of very limited surface, and consequently of very limited agricultural capacity, but containing within itself the capabilities for manufacturing and commercial industry, sufficient to realize the necessaries and conveniences of life for ten times the number of inhabitants, who could, by any possibility, be fed by the agricultural produce of the surface, it is not difficult to assign the consequences which must arise from permitting the feudal owner of the soil to prohibit foreign trade in food, and limit the population to the produce of his own barns, with a view to enjoying the monopoly price that would result. The nine-tenths of the population that ought to have been, must be either worn down, or prevented from coming into existence at all, by the pressure of men bidding one against another for food. Wages and profits must be everywhere reduced to the killing point; that is to say, to such a point as will cause nine-tenths of the natural population of operatives and traders to be non-existent, through the joint operation of poverty and bankruptcy. Of professional persons of every kind, as doctors, lawyers, bankers, artists, writers, with the whole tribe of shopkeepers and others who depend upon the custom of the public, nine out of ten must be put down, by the impossibility that more than one in ten should find the means of keeping above water; and this must be

effected by the same bitter process, of rubbing one man's profits against another's, till the weakest go to the wall. To the agricultural labourers and farmers the mischief must soon extend. For a brief period an impulse might be given to the quantity of employment in their trade; but as soon as they have multiplied up to this very limited increase, they must find that they are only five where they would otherwise have been four, and that the five are worse off than the four, in consequence of all openings for any further increase in their numbers being hermetically sealed. A limit being put to the possibility of employment in other trades, farmers and farmers' labourers must breed against the stone wall, as well as any other portion of the community. If they attempt to rear on an average more than two children each, for every one of the extras that succeeds in getting a living, one must be trampled out of existence somewhere else; and this, as before, by the process of one man bidding against another for farms or for employment. To the resident landowners, if such they were, the evil must extend at last, in the shape of the impossibility of finding profitable employment for children, and the consequent necessity of sub-dividing their estates. The family five hundred a year might by the monopoly be made seven; but when this comes to be divided among fourteen children, it will be a poor compensation for the possibility of any addition from new sources being comparatively cut off. In short, from top to bottom, there *must* be an "agricultural distress." One class of men only could ultimately gain; and that would be the man who could raise his nominal income by the monopoly, without being involved in the consequences; in other words, the man who was either to have no family, or was to have some way of supporting them distinct from engagement in any honest calling on the rock.

For "rock" read "island of Great Britain," and this is a representation of the state in which we are. Every man's industry has for twenty years been cut down, under a scheme for putting gains into the pockets of the legislating class, which have turned out to be no gains after all. The owners of the soil have had their own way to the utmost; they have had possession of the avenues to law, by admitting no man into the House of Commons who did not make oath that he had what they considered to be a pecuniary interest on their side and against the public;—and the winding up has been, that after making the country a fraction of what in wealth and power and happiness it might have been, they are obliged to avow an "agricultural distress," and ask for aid. They have trampled the operatives into the poor house, and the merchants into the Gazette, by a daily and hourly process; and it comes at last to a confession that they have done themselves no good. Is it not time that law-making should be in other hands? The opportunity is favourable. The increase of actual distress, proceeding from a rise in the price of corn, gives the excitement to the numerous classes, without which it is no secret that it is difficult to combine them in resistance to a long established wrong. The farmers are coming over; and, more slowly, the smaller landlords.

They are finding out, that they must either continue for ever as they are, or retrace their steps at the expence of some present increase of evil which is the balance of that spirit of advantage to their trade which took place when the mischief was begun. They are discovering, that their interest is not in the preservation of the public mischief, but only in its being removed by such gradations as shall allow their share in the general good, in a certain degree, to keep pace with the temporary suffering which is the counterpoise of their former fugitive advantage. With this claim it would be both cruel and impolitic not to comply. Let the agricultural classes join candidly in the removal of the evil, before the fortress is carried by popular assault and their assistance is of no value,—and they may count on all the attention to their representations on the subject of gradual alteration, which reasonable men can require. That the evil cannot ultimately stand, is felt universally; and its staunchest supporters are at this moment busy in avowing, that their hopes rest on persuading the manufacturing classes to call for paying double for their bread. The time is gone by when delusions could be maintained on this point; the parallel, referred to above, is sufficient to enable any moderately acute and upright individual to answer all such fallacies. When any man is tempted with an argument for the Corn Laws, let him ask himself what chance it would have with him if he was an inhabitant of the "rock," and he will find the answer. While the political economists were piddling about the questions of capital and wages, the public misery has leaped to the conclusion, that the great question of all, is whether capital and labour shall be free. In addition to the other sources of strength enumerated, the Government, so far as its members are unbiassed by supposed personal interests, must have a leaning towards being at the head of the great and rich nation, instead of the small and poor. What are the ordinary struggles and successes of a Chancellor of the Exchequer, compared with the prospects opened to him from legitimizing foreign trade, and giving to British industry the market of the world?

The danger to be guarded against from the beginning, is the stopping in some half-way measure of iniquity. The sytem has been cunningly devised by the public enemy, so as to provide for a relaxation of the instant pressure, whenever there is danger that by the national resistance the machine should burst. The confiscatory law on the fruits of labour has been constructed with a valve, intended to maintain an average and constant pressure of the greatest magnitude consistent with the safety of the actors. All this only creates a call for increased union and foresight. We are not contending with a simple evil, but one complicated with all the difficulties and chances of evasion the skill of the contrivers could throw about it. Whenever the union of the public attains to any dangerous height, the policy of the adversary will be to throw to us an extensive reduction of the momentary pressure, with a view to save the rest. Every device will be put in action to preserve the *maximum* of evil at any price. It will remain to be seen whether the public, fore-armed, will give in to the proposals of the enemy.

If the manufacturers had got a law to put a tax on home-grown corn, for the purpose of increasing the quantity which must be bought with their manufactures from abroad,—and had added a graduated scale, falling as corn became *lower* in price, so as to preserve to themselves the trade in corn except when the injustice was likely to become too glaring for endurance,—this would be the exact counterpart of the iniquity now put on the rest of the community by the growers of corn. Would the home growers, under such circumstances, be satisfied with any thing short of, at the very least, the removal of the iniquity by the deduction of a fixed number of shillings annually from all the grades of the existing scale? If *they* would not, why should we?

The points on which the Association is intended to furnish assistance, are—

1. To give information on the mode of preparing and presenting petitions; and to forward copies of petitions, where requested.
2. To facilitate the formation of Public Meetings, and the dissemination of the results.
3. To effect insertions, where desired, in the metropolitan and country newspapers.
4. To promote the distribution of tracts, slips, and extracts.
5. To encourage the formation of local Anti-Corn-law Associations.
6. To employ the privilege of franking, in aid of the general objects of the Association.

Communications to be addressed to the Secretary of the London Anti-Corn-law Association, 162, Fleet Street, London.

ON EDUCATION AS IT IS AND AS IT SHOULD BE.

To the Editor of the Anthropological Magazine.

Sir,—Having witnessed, with pain, the ignorance of teachers in their calling, and their general abandonment of all principle, method, and reflection in the discharge of their duties, it is my present intention to intreat the attention of that class to the maxims of some of the greatest authorities, on a few vital points, on the *manner* of mental training, and the *matter* fittest to engage the youthful mind. I shall give the opinions as much as possible in the words of the originals, though it will sometimes be unavoidable to link ideas together with my own words.

Education may be defined—the science which teaches us how to cultivate the faculties with the greatest advantage; to strengthen the weak, moderate the over active, and to combine all into one harmonious whole. It was formerly a frequently agitated question, whether general education was a beneficial thing: but the very form of the question is founded in error; for, every human being, of necessity, is educated; and it is as impossible to withhold education from the mass of mankind, as it would be to deprive them of air. The question, therefore, as an able writer has lately said, is

not between education and no education, but between a good education and a bad education. The pickpocket and poacher are educated equally with the university youths, and the education in these cases, as in every other, commences at birth.

Education may be divided into two distinct heads:—1st, the *manner* of instructing, and 2nd, the *matter*. This distinction is very generally overlooked, in consequence of which very disastrous results ensue. "The manner of giving instruction," says Mr. Owen, "is *one thing*, the *instruction* itself another, and no two objects can be more distinct. The *worst* manner may be employed to give the best instruction, and the best manner to give the worst instruction." I am afraid that it is too frequently the case to find the worst manner and the worst matter combined. It is my intention to say a few words on the *matter* first.

The grand staple of the education of the upper classes of society consists of LANGUAGE, and of the lower classes of READING and WRITING. In both these systems only one organ is cultivated; in the former case that of language, and in the latter that of form. Thus the remaining thirty-nine, (for there are forty in all,) in each case, remain comparatively fallow, without any systematic plan of cultivation. This strange circumstance results from the utter ignorance of teachers of the constitution of the human mind, a knowledge of which they appear to think as foreign to their calling as the Hindoo rites—verily they have their reward. Language, however, has hitherto been unquestionably allowed to usurp too much of the valuable youthful years, and the small success which has attended teachers in their attempts to impart even this, their favourite branch, notwithstanding their strenuous exertions and costly sacrifice of time and money, renders one still more inclined to grudge the lavish prodigality, than if success had been proportionate to the sacrifice.

Language, however, being an acquirement indispensable to mankind, requires that a certain time be devoted to it; and it is obviously the duty of teachers to seek the speediest and most effectual mode for communicating it. This, however, they do not trouble their heads about, or if they do, their mode of proceeding shows that they have not heads worth troubling. It would scarcely be believed by reflecting men, but it is nevertheless a fact, that not unfrequently one half or more of the time daily devoted to language is apportioned to *grammar!* I shall quote the opinions of some high authorities on this subject. "In teaching a language," says Lord Kaimes, "it is the universal practice to begin with grammar, and to do everything by rule. I affirm this to be a most preposterous method. *Grammar is contrived for men, and not for children.* Its natural place is between language and logic: it ought to close lectures on the former, and to be the first lectures on the latter. *It is a gross deception that a language cannot be taught without rules.* A boy who is forced into grammar rules, makes a shift to apply them; but he applies them by rote, like a parrot. Boys, for the knowledge they acquire of a language, are not indebted to dry rules, but to practice and observation. *To this day I never*

think, without shuddering, of Disputer's grammar, which was my daily persecution during the most important period of life. Curiosity, when I was further advanced in years, prompted me to look at a book that had given me so much trouble. At this time I understood the rules perfectly ; and was astonished that formerly they had been to us *words without meaning*, which I had been taught to apply mechanically, without knowing how or why ?"—*Hints on Education*, p. 279.

This passage is admirably true, and had it been adopted by teachers as such, the pupil might then have had a chance of that which, under the present method, is next to impossible—learning a foreign language within a reasonable time, and that too with pleasure both to teacher and pupil. Let us now, however, listen to another, and equally high, authority on the subject. " If grammar ought to be taught at any time," says Locke, " *it must be to one that can speak the language already ;* how else can he be taught the grammar of it ? This, at least, is evident from the practice of the wise and learned nations among the ancients. They made it a part of education to cultivate their own, not foreign languages. The Greeks counted all other nations barbarous, and had a contempt for their languages. And, though, the Greek learning grew in credit amongst the Romans towards the end of their commonwealth, yet it was the Roman tongue that was made the study of their youth ; their own language they were to make use of, and therefore it was their own language they were instructed and exercised in.

" But, more particularly, to determine the proper season for grammar, I do not see how it can reasonably be made any one's study, but as an introduction to rhetoric. When it is thought time to put any one upon the care of polishing his tongue, and of speaking better than the illiterate, then is the time for him to be instructed in the rules of grammar, and not before. For grammar being to teach men, not to speak, but to speak correctly, and according to the exact rules of the tongue, which is one part of elegancy, there is little use of the one to him who has no need of the other. *Where rhetoric is not necessary, grammar may be spared.* I know not why any one should waste his time, and beat his head, about the Latin grammar, who does not intend to be a critic, or make speeches, and write dispatches in it. When any one finds in himself a necessity or disposition to study any foreign language to the bottom, and to be nicely exact in the knowledge of it, it will be time enough to take a grammatical survey of it."—*Locke on Education*, p. 78.

Were it not for Phrenology, the procedure of teachers in the discharge of their duty, would be inexplicable : and accordingly before I was acquainted with that science, I used to find myself completely at fault in my attempts to account for what I witnessed daily. It frequently struck me that there was no real desire on the part of the teacher to impart knowledge, who seemed, on the other hand, to experience a delight in a system of petty tyranny. Petty ! did I say ? Heaven knows there is no tyranny like domestic tyranny. Mental coercion is a hundred fold more bitter than any pain

that can be inflicted on the body. However, on acquiring a knowledge of Phrenology, the conduct of the dominie becomes at once apparent. Individuality, eventuality, and especially causality, will be found deficient: and more than all, I should suspect that highly probable organ, (announced by Fowler, a clever American phrenologist, situated above comparison,) and which gives an intuitive insight into human character, and accordingly renders its possessor capable of suiting his manner to the dispositions of those around him. Instead of any observable manifestations of this indispensable faculty, the master continues his own blind course, turning neither to the right nor to the left, and wasting his own energies and the pupils', by a perpetual friction, caused by opposition.

It is, however, the fault of the parents in most cases, that the time and the spirits of their children are wasted. It is true that they find it impossible to obtain an instructor capable of properly discharging his duty; but then an inspection of his head will show *how far* he is to be trusted. The parents, however, place an implicit reliance in the teacher, and the devoted children are forthwith delivered into the hands of their tormentor. The latter being utterly unacquainted with the human mind, speedily finds cause of complaint, and the parents' being informed, act as if the pupil was all to blame, and as if the master's word was alone true. I have known many distressing scenes to arise out of such circumstances as the following:—In the midst of a dreary parsing lesson, the pupil makes a mistake in the tense of a verb; the master uses angry words, manifesting destructiveness strongly in his tone and countenance; the pupil's tone is immediately lowered, and he tries again, and again mistakes: the master becomes more angry, and taking the book, shows it to a pupil on the other side, and, in a bitter tone, says, "You would hardly believe it, but baby —— said this was the present subjunctive." He then returns the book with a dark look, and asks again, what tense the word is. The pupil now gives a random answer in a sulky tone: his self-esteem, love of approbation, destructiveness, and firmness, having been aroused by the corresponding organs of the teacher: the latter now stares his victim full in the face, and says, "O! so you were doing it on purpose all the time, were you! but I can see into your wicked arts." And thus he proceeds for some time, when the pupil, goaded to desperation, makes some spiteful answer. The wrath of the master boils higher still: and suddenly, in a voice considerably lowered, he says, "I'll let your father know of this." At the end of the lesson he drags his pupil before the father, who, after hearing the account of the master, asks the boy what he has to say: he answers by his sobs. Being thus clearly guilty, as he has nothing to say for himself, he is given a reprimand and dismissed; and for the next week has nothing but grave looks on all sides.

I might enter into many other details, but this will be sufficient for the present. And this is Education! And so it is in some sort; that is, an education of the organs at the back of the head instead of those in the front. The ostensible purpose of engaging the master was to cultivate the organ of language, but the upshot

of it is, a systematic development of destructiveness, secretiveness, and cautiousness. And after years thus spent, the parent and teacher wonder that the pupil should be "so passionate," or "so secretive," or "so shy!" I am convinced that there are very few who even know what education means; and moreover, that many of those who talk most about it, and think themselves interested in it, know very little more of it than the rest. Some think (or rather, perhaps, I should say, *thought*, for the notion is now well-nigh exploded,) that education consists in reading and writing. As well might it be said that putting a sword into the hands of a recruit was teaching him the art of war. Another, and a much larger, class entertain the still more dangerous doctrine, that everything possible has been done for the education of a pupil when he has been supplied with tutors, and books, and maps, and slates; and this is called giving the pupil "great opportunities." Individuals of this class have the word education very often on their lips, but it is not education that they want to obtain, but masters (no matter of what kind); and if, after a long series of years, they feel any cause for regret, it is chiefly because the children were not earlier or oftener with their instructors.

This class is apt to shelter its proceedings under the name "Pestalozzian." Having frequently heard strange things sanctioned under that name, I was induced to examine the doctrines of Pestalozzi. The more I became acquainted with the writings of that celebrated man, the greater became my astonishment at the conduct of his pretended followers. In his work on Education, he commences one of his chapters thus: "If a mother is desirous of taking an active part in the intellectual education of her children, I would first direct her attention to the necessity of considering, not only what sort of knowledge, but in what *manner* that knowledge should be communicated to the infant mind. For her purpose, the latter consideration is even more essential than the former; for however excellent the information may be, which she wishes to impart, it will depend on the mode of her doing it, whether it will at all gain access to the mind, or whether it will remain unprofitable, neither suiting the faculties, nor being apt to excite the interest of the child." This is sound doctrine, more so than that of Mr. Owen, who exactly reverses the relative importance of manner and matter, yet here at the very outset we find that the self-called Pestalozzians desert their master, for not a thought do they extend on the *manner*, no, they only consider what dictionaries, and what grammars, &c. they shall use, it never occurring to them that they have pupils to *interest*.

Again, Pestalozzi's principle was, "*to awaken the feeling, and then to give it a name*, and, when it was alive, to substantiate it as a rule of action." This is admirable! but from being overlooked teachers are caused much disappointment: they frequently tell their young charge that "nothing can be done without the moral." "There must be cheerfulness and good nature," and "everything depends on the will," &c., thus just reversing the maxim of Pestalozzi, who first excited the feeling, and *then* substantiated it

as a rule of action." We are told, moreover, that Pestalozzi "trusted little in precept," and in this he was quite right: for I can speak from experience that such precepts, as those quoted above, might just as well be doled out in Chinese, as in the mother tongue, and better too; for, in the latter case, the feeling of nausea, and disgust against the subjects, so dryly recommended, would not be excited: the very names "well," "moral," &c. soon become distasteful. "Pestalozzi maintains that every plan of education ought to be based on a consideration of the nature or faculties of the child." Which among the Pestalozzians, has acted on this: nay, I question whether there are many who know what the faculties of the child are. Again, the great educationalist tells us, "a child is a being endowed with all the faculties of human nature, but none of them developed: a bud not yet opened. When the bud uncloses, every one of the leaves unfolds, not one remains behind. Such must be the process of education. *No faculty in human nature but must be treated with the same attention;* for their co-agency alone can ensure success." Which of the Pestalozzians has been Pestalozzian here? Again—"*The strictest attention should be paid to the shades of individual character and talent.* This is a precept disregarded by common consent, and this disregard has the sanction of the most ancient usage: not fifty Pestalozzis could have enforced attention to it—*nothing but Phrenology could do so.*

Now, however, we come to a point more important than the rest; one indeed which includes all the others. In an article which I published some time ago, in the *Analyst*, the following passage occurred:—"I think it may safely be affirmed, that if a pupil does not advance in his studies, or does not advance so quickly as he should, the fault is never his own;" and after bringing forward proofs of this, I conclude:—"I contend, therefore, in every case in which the pupil remains stationary, or advances but slowly, the cause must be referred either to the ignorance of the teacher, or to the mal-organization of the pupil's brain." This was stigmatized by *Pestalozzians* as dangerous, &c. Judge then of my surprize when I met with the following passage of Pestalozzi:—"The *interest* in study, is the first thing which a teacher, and in the instances before us, which a mother should endeavour to excite and keep alive. There are scarcely any circumstances, in which a want of application does not proceed from a want of interest, and there are perhaps none, under which a want of interest does not originate in a mode of treating adopted by the teacher. I would go as far as to lay it down for a rule, that whenever children are inattentive, and apparently take no interest in a lesson, the teacher should always first look to himself for the reason." Here is the same idea in nearly the same words, by Pestalozzi himself. He indeed goes even further than I did, for I divided the blame between the teacher and the organization. Pestalozzi throws it justly almost entirely on the former. I mention this to show how impossible it is that the mere dicta of any individual, however illustrious or successful, can place a subject like education

on a firm foundation; for his followers, overlooking his precepts, will merely shelter their own absurdities under his name, while a science is absolutely necessary for the elucidation of the subject, and that science is Phrenology; whithout which, all systems of education must be empirical.

Mr. Owen, of New Lanark, goes further than the article alluded to: he says, "From the earliest ages it has been the practice of the world to act on a supposition, that each individual man forms his own character. This error cannot longer exist, for every day will make it more and more evident, that the character of man is, without a single exception, always formed for him; that it may be, and is chiefly, formed by his predecessors; that they give him, or may give him, his ideas and habits, which are the powers that govern and direct his conduct. Man, therefore, never did, nor is it possible he ever can, form his own character." Mr. Owen has unquestionably effected the most admirable results in his village of New Lanark, but his views possess neither originality nor soundness. Those who are interested in this subject, will find their erroneousness exposed in vol. I. of the *Phrenological Journal*, by Mr. Combe; and in vol. IX, by Mr. Holm. Such a work as the *Constitution of Man*, or the *Functions du Cerveau*, will benefit mankind more than a dozen New Lanarks, for the former will put the people in the way of procuring these latter by their own exertions, independent of any individual.

All the errors in education which I have named, and most others, have been reprehended by Locke, Kames, Gibbon, Bentham, Pestalozzi, and a host of other great names, but all in vain: and what does this demonstrate? Why simply as before stated, the *impotency of individual authority*, and the *necessity of a science*. I therefore hope we shall hear no longer of Pestalozzian masters and systems, and that these will give place to phrenological masters and systems. It may be all very convenient to launch out into vague exclamations about cultivating the heart; (it is to be hoped this word will soon be obsolete as connected with mental manifestations); but as Pestalozzi truly says, all education must be based on an accurate knowledge of the faculties of the human mind. I shall conclude this limited paper with a passage by Pestalozzi, which should be committed to memory by every teacher—though he *ought* to know it intuitively.

"Of all tyrants, it is well known that little tyrants are the most cruel; and of all little tyrants, the most cruel are *school-room tyrants*. Now, in all civilized countries, cruelty of every description is forbidden, and even cruelty to animals is very properly punished in some by the law of the land, and in all stigmatised by public opinion. How then comes CRUELTY TO CHILDREN to be so generally overlooked, or rather thought a matter of course?

"Some, forsooth, will tell us, that their own measures are wonderfully humane,—that their punishments are less severe,—or that they have done away with corporal punishments. But it is not to the severity of them that I object, nor would I venture to assert, in an unqualified manner, that corporal punishments are inad-

missible, under any circumstances, in education. But I do object to their application, I do object to the principle, *that the children are to be punished when the masters, or the system, is to blame.*

"As long as this shall continue, as long as teachers will not take the trouble, or will not be found qualified to inspire their pupils with a living *interest* in their studies, *they must not complain of the want of attention, nor even of the aversion which some of them may manifest. Could we witness the indescribable tedium which must oppress the juvenile mind, while the weary hours are slowly passing away one by one*, in an occupation which they can neither relish nor understand the use; could we remember the same scenes which our own childhood has undergone, we would then be no longer surprised at the remissness of the school-boy, creeping like a snail unwillingly to school."

W.

June 5, 1837.

MUTUAL IMPROVEMENT SOCIETY OF WINDSOR, ETON, AND THEIR VICINITIES.

Established December, 1835.

The least examination of oneself testifies to the fact, that man has an immense variety of wants. Some are animal, some moral, some religious, and some intellectual. To satisfy the first, society has been engaged from the earliest periods of man's history: to satisfy the rest, in later years, society has been more active than in any other period of the world's progress. Great Britain has been foremost in these attempts; and the victories she has gained over intellectual, moral, and devotional errors, are greater than those which have attended her flag and her standard.

As evidences of the progress made in this respect, we refer with peculiar satisfaction to the various institutions, now established in almost every town, for the purpose of diffusing *scientific* and *literary* information, under the titles of Literary and Scientific Institutions, Mechanics' Institutions, Discussion Societies, Mutual Instruction Societies, &c.

Windsor has not been neglectful of the duty to provide for the happiness of her townspeople in this respect. A few years since a few friends met for the purpose of establishing an institution for their and others' improvement. Their objects were to have a LIBRARY, a READING ROOM, to PROVIDE LECTURES, and to have CONVERSATIONS on various subjects. They joined, and formed a society having these objects in view. This was in the year 1835. During the first year they obtained 30 members: received on loan many volumes, and by purchase and gift some volumes. Mr. G. Potbury kindly gave the use of a room for the society for the first twelve months.

During the second year of its establishment, the number of

members was 95: the number of volumes received on loan being 150 volumes, the number purchased or given 100 volumes, making a total of 250 volumes in the use of the society. Dr. Ferguson, the respected physician of Windsor, has kindly aided, by granting the use of 48 valuable volumes.

The following is a list of Lectures delivered by the members:—

On the Origin and History of Typography,	(2 lectures)	Mr. Farren, Jun.
On Architecture		Mr. T. Jenkins
On Vision	(2 lectures)	Mr. A. Potbury
On Phrenology	(2 lectures)	Mr. G. Potbury
On Astronomy		Mr. G. Potbury
On the Nervous System		Mr. A. Potbury
On Form		Mr. A. Potbury
On the Faculties of Man		Mr. C. Provost
On English History	(2 lectures)	Mr. Farren, Sen.
On Intellectual Pursuits	(2 lectures)	Mr. J.W.S. Potter
On Natural History		Mr. C. Provost

Mr. Garland has given a Course of Lectures on Anatomy, which excited much interest.

Treasurer	Mr. Farren, Sen.
Secretary	Mr. J. W. S. Potter.
Librarian	Mr. G. Potbury

The society is much indebted to the above gentlemen for their great exertions; also to Messrs. Brudenell, Burn, and the committee generally.

A Newspaper Class is now established.

Of late the committee obtained the co-operation of Dr. Epps, by giving some Lectures on Phrenology, which caused audiences in number greater than the most valued friends of the institution expected; the mayor kindly granting the use of the Town Hall.

It is hoped that the inhabitants of Windsor will prize this attempt to give an exalted character to their town: that they will seek, by their co-operation, to give Windsor as high an intellectual, a moral, and a truly religious character, as it is high in royal dignity.

The subscription to the institution is 2s. 2d. per quarter. Many particulars of the society were most readily communicated to us, and will, no doubt, be communicated to others, by the honorary secretary, Mr. Potter, whose services in behalf of the institution have been both numerous and valuable.

We feel pleasure in recommending this society to the notice of those of our readers who live in and near Windsor: we have no doubt, now that the *newspaper* class is established, the society will be attended with the best fruits: it will develop a nobility of mind and an enlightened strenuousness of purpose, that will enable its members to see the right, and seeing it, pursue, notwithstanding the allurements of tempting splendour, the terrors of castellated power, or the menaces of clerical usurpation.

FINSBURY DISCUSSION SOCIETY, Wednesday, 8th of March, 1837.—The President in the chair

Is the Female Mind equal to that of the Male?

In concluding the discussion upon this subject in the last Number of the Magazine, we did not report Mr. Thomas's reply. We have since received it. It follows:

Mr. C. Ebenezer Thomas in reply to those who had taken the opposite side to himself remarked, that had it been left to the members to have decided upon the subject on the last evening, at the close of the first speaker's excellent address, he would not have sought to offer anything in addition to that learned gentleman's observations. Others however succeeded him of different sentiments, therefore with a desire to regain his first position, he, (Mr. T.) would add a few words. The first gentleman upon the opposite side was Mr. Beilby, and much was he surprised to find him differing from himself. Mr. Beilby had said that "there was a strength of mind required in cultivating Latin, Greek, and mathematics, such as woman seldom had." Another speaker differed from him, having known ladies, (and by no means solitary, but numerous instances,) who acquired a proficiency in those branches of learning in a much shorter space of time than man, and with apparently greater ease. Mr. Thomas, in adverting to Mr. Munday's speech, said that Mr. Munday's idea, that as woman had to bear with the frivolities of infancy, which, to a great mind, would be a source of misery, she needed not a great mind, he must regard as decidedly erroneous. Mr. M. had further observed, that the questions of an infant to a masculine mind would be irksome. This argument appeared to be in his (Mr. T.'s) favour, as, he conceived, to be prepared for answers to the curious interrogations of children required great aptness, as their subtle questions not unfrequently would baffle the learned mind of a philosopher. To prepare works suitable for their capacities, in fact, only talented individuals could succeed, such as Watts, Croker, Lord Dover, Edgeworth, and the Taylors. Mr. Munday had observed, that in religious subjects woman possesses a great degree of acumen. If such be the case, Mr. T. could assure him, that this bore in his favour, as to become an eminent theologian required a remarkable stretch of the mental faculties. In reply to those gentlemen who had brought forward scripture characters, such as Moses, David, Solomon, &c. Mr. T. stated that he hoped that they would not overlook such as Rebecca, by whose skill (not that he would wish to palliate the act) her younger son attained the birthright. The mother of Moses also might be cited; nor could he forget the strains of Deborah for Israel's success, nor omit Anna, the prophetess, and Elizabeth, in their majestic anthems. View also Esther, and behold her heroic conduct, unconscious that to her the royal sceptre of her consort would be extended. Many a heart

in man would have sunk at such a step. Female scripture biography will furnish many other characters. Mr. Henry Thomas had said that he had never heard such a paucity of arguments, from first to last, as had proceeded from him; he, however, thought that his shaft would recoil on himself; as he was satisfied, that if the opening address contained but few arguments, that the meeting considered that that of his namesake, Mr. H. T. possessed fewer. Mr. H. Thomas had charged Mr. Williams with being perfectly incomprehensible; although, perhaps, to none but himself. Mr. H. T. had remarked that the tastes of boys and girls were different, while the latter would delight in dolls, the former find pleasure in playthings of a different order; but he (Mr. C. E. T.) would ask him, does this arise from education or from an innate disposition? Mr. Loosely was the next opponent; Mr T. was not surprised to find him upon the same side as two of his predecessors, (he referred to Mr. Beilby and Mr. Henry Thomas); for he had frequently remarked that they agreed as touching any point in the society, and thus always forming a trio, sung in perfect harmony. Mr. T. thought that Mr. Loosely was unsuccessful in his attempt to overthrow two illustrations of Mr. Burn's; he alluded to the mother of Dr. Doddridge and Lady Hamilton. In reference to the Doctor's mother instructing him in his childhood, on scripture subjects, by the painted tiles around the fire place, his friend Burn did not intend to lay much stress upon the artist's workmanship as a means of her manifesting her descriptive talents to her child; but, that, from the simple figures, she would carry his infant mind through the various incidents of the subject's histories, and thus filled up the outlines. Mr. T. also cordially agreed with his friend in his other illustration, Lady Hamilton, for, in Nelson's public life, she greatly assisted him by her counsel and by her solicitation; England's hero was induced to quit (alas! for ever,) his rural villa, and engage in that battle, which, although glorious for his country, was fatal to himself. 'Twas true Lady Hamilton commanded not the army, but she possessed a kindred soul with Nelson, for where he went there was her heart, for though absent in body she was with him in spirit. A few words to Mr. Baker and he would close. Mr. T. thought that Mr. B. in the course of his short speech, would not have adduced Satan imposing upon Eve, if he had entered the room earlier and heard the excellent definition given by Mr. Brown, who had anticipated that such an hypothesis might be advanced, as a proof of the superiority of the sex to the other. Mr. Baker in the course of his professional practice had found that five out of ten of his fair friends believed in fortune telling. This Mr. T. considered did not invalidate his position. If this is a characteristic foible of the sex, (in which Mr T. placed no trust) then would they only stand on the same eminence as Napoleon and other gigantic minds. It has often been noticed in the history of mankind, that those who possess the loftiest parts in some points, have the greatest weakness. Mr. Baker's friends' mental powers might however, have been below the ordinary standard of the sex. Mr. Thomas afterwards cited long extracts

from a modern writer whose sentiments accorded with his own, and concluded by stating, that such names as M'Cauley, (the English historian) Hannah More, Somerville, Rowe, Taylor, Barbauld, Edgeworth, Martineau, Holland, Mitford, De Stael, Genlis, M. W. Montague, and Hemans, he thought would justify him in his own opinion, and he would say with the poet, "Palmam qui meruit ferat," and himself reply of women, let her bear the palm for she deserves it.

PROGRESS—SCIENTIFIC, MORAL, AND POLITICAL.

It is impossible to look at the present aspect of society, and to contrast it with the state presented a few years since, without experiencing the conviction, that a great amount of improvement has been developed: and not only this; but, that, in addition, the means for developing additional improvements have been produced at the same time. The prospect, therefore, assumes the pleasing character that man's real happiness is in rapid progress: for evident it is, that though happiness may not always accompany improvement, yet improvement is an essential constituent in the production of happiness. It is true that the value of improvement is by many not fully appreciated, because many of the most important improvements of the age have been seized by the hand of monopoly, and have been used for the production of individual accumulation, instead of for the diffusion of general comfort. But this is part of the progress necessary to establish improvement on its proper basis: because there can be but little doubt that man, constituted as he is, requires the force of the motive arising from misery, to make him value, so as to retain, the benefits arising from improvement. It is true that the "whole creation groaneth;" and it is equally true that the Creator, who is love, has permitted this state of things, which he would not have permitted, had not he known that the state of man is such, that, as the best means of ensuring the diffusion through ages yet to come, of the benefits of past improvement, it is necessary that man should see that these improvements were obtained through much suffering. In this point of view, namely, that suffering is essential to convince man of the value of the improvements which he enjoys, we may even rejoice in the miseries that have been inflicted by despotic rule in the past periods of the world's history; since, in future ages, the history of these miseries, as connected with despotic rule, will make the generations, then living, use every precaution to prevent the existence in government of any principle of power, save the REPRESENTATIVE.

It may be asked, What evidence we have of improvement? The evidences are so numerous that we cannot here enumerate them.

The question follows upon this, What is *improvement? In what does it consist?* The answer is important, as developing, perhaps, more fully, what it has been the endeavour in the pages

of this Magazine constantly to keep before the view, namely, that man's misery is as essentially connected with disobedience to the Creator's laws, as his happiness is with obedience to those laws.

Improvement, therefore, is the *result of discovering the laws of the Creator*, and of the *application* of that discovery to the purposes of existence. Who will deny that the steam engine is a means of improvement? But what is the steam engine as a means of use? Nothing more than the application of the knowledge of a law of the Creator, that WATER *in its expanded form*, namely, *vapour*, has a great power derived from its ELASTICITY, and that that power may be suddenly destroyed by the application of the knowledge of another law of the Creator, that vapour can be *rapidly condensed into a liquid*. Improvements do not drop from heaven. Improvements are the results, let it ever be remembered, of the Creator's laws. They can never be obtained from any other source. And, therefore, as everything which is put forward as an improvement, if it is not really so, occupies time and wastes energies, which might be applied in the developing of the benefits connected with real improvements, it is essential, when anything is put forward as an improvement, that we should examine whether such improvement is the *application of a law of the Creator*. If it be not, we may be sure, that, however specious its claims may be, the want of reality will be detected at a period not far distant. Let men once believe that improvement is founded upon this solid basis, (and what can be more solid as a basis than the will of the Creator?), and then the impostor and the empiric will have no chance of deceiving the public mind: the honest and skilful inventors, or rather *applicators*, will be recognized, and will receive the reward which, as discoverers, they deserve.

In reference to *moral* and *political* progress, there are times at which the strides are great; so it is in scientific progress. One event has occurred at this time, which will bear much upon the political progress of society. The last few days have been beclouded by the fact, the convincing fact, that royal power does not entitle its possessor to the immunity from mortality. At the moment of writing this, the hand which, a week since, swayed the sceptre of this, the noblest kingdom on the earth, is now lying helpless, still, motionless. A new monarch ascends the throne: and ascends it with the general expectation, that she will march forward in the removal of those many causes which now impede the political progress, so essential to happiness. This general opinion will develop the progress, even though the monarch, now reigning, does not fulfil the high expectations raised in regard to her. The very thought that a progress is about to take place, will induce such a state of the public mind, as will ensure that progress. It is, therefore, with joy that this event is to be regarded: a joy dependant upon the fact, that it is an event connected with progress; and that progress is happiness.

It should, however, ever be remembered, that the progress can be obtained only as it is attempted to be realized through the laws of the Creator and their application. Politics, properly viewed, is

a science, teaching us the laws of the the Creator regulating *man's social existence.* It is the duty of man, therefore, to follow out those investigations, which will end in the discovery of these laws: and it is, therefore, that the existence of a Political Economy Society is to be hailed with great satisfaction.

In developing this important progress, it will fall to the duty of the electors of this country soon to be in a condition to do their part: and that part is to send no man to Parliament but will pledge himself to the support of this progress: who will agree to abolish certain laws, the audacious violation of the will of the Creator, (in the making dear what God has made cheap) commonly known under the name of the Corn laws: who will vote that no man shall be taxed to support another man's religious creed: who will open his mind to the study of the principles of legislation: and who will not make use of his parliamentary influence to support the profligacy of nobles, of ministers, or of bishops.

LORD ABINGER'S SAGE (!) DEFENCE OF CHURCH RATES.

"Church rates were a legal contribution upon the subject, no matter whether jew, dissenter, or catholic; and he was bound to state, that any attempt to excite opposition against it, or to inspire hatred against those who were engaged in the collection of it, was contrary to law.

"The reasoning upon which church rates was attempted to be refused was most frivolous, without a touch of common sense. When a man took a house, he took it subject to the church and other rates; and he was, therefore, bound to pay them. If he were an honest man, he would say, at the outset, that he would not pay the church rate. It was the 'idlest,' 'silliest,' and most foolish thing ever done by 'ignorant' men, to excite a clamour against an impost which was levied according to the law of the land."—*Wood* v. *Douglas, Court of Exchequer*, 1836.

QUEEN ELIZABETH—HER TACT.

A Romish priest was sent by Queen Mary to Elizabeth, who was residing at Hatfield, to ascertain her sentiments on the nature of the Lord's Supper: most likely with the view of entangling her. When asked what she thought of the passages, that "this is my body," and "this is my blood," Elizabeth answered,

> Christ was the word and spake it,
> He took the bread and brake it;
> And what that word did make it,
> That I believe and take it.

THE CHRISTIAN PHYSICIAN,

AND

ANTHROPOLOGICAL MAGAZINE.

[ανθρωπος, anthrōpos, *man*, and λογος, logos, *a discourse.*]

No. 12.] AUGUST 1, 1837. [Vol. II.

THE QUEEN'S FRIENDS.

"The Queen's Friends" is a phrase which good men *may* use, and which knaves *will be sure* to use.

To prevent the use being, in the former case, a source of misunderstanding, and in the latter a source of deception, the phrase itself may be with benefit examined.

We may picture to ourselves a lovely young female, whose history for the last fifteen years has been before us; as having in early infancy been deprived of the care of a respected father, and then intrusted to maternal love; as having gradually progressed, exhibiting, as she improved in person, a corresponding improvement in mind; as having her name associated with words of tenderness and acts of beneficence; as having been educated with a tendency to every noble deed, and with enlarged views of the duties which the social relationships establish; as having been, and being, hated by one, whose name stinks in the nostrils of all, save the carrion flies of society, our pillagers; and finally, we may picture this interesting being, as coming forth to the view of the nation, in the just developed beauties of womanhood, with a dignity, impartible only by a good education: With such a picture, or, rather, series of pictures, before the mind, gallantry and humanity would indeed be dead, if we, contemplating this lovely creature, fleshed in the personal beauties of womanhood, and adorned with the graces of the intellect, and the tender, but chastened, ornaments of a kind and just spirit, did not declare ourselves as The Queen's Friends.

But such a view and such an understanding of the phrase bind us only to the friendship, due to her as a *beautiful and an exalted model of polished humanity*, as a creature of many pleasant, though perhaps slightly mournful, associations.

When, "The Queen's friends," with this picture before the mind, we are friends to the Queen as a *woman*, not to the Queen viewed as a *Queen*.

It was this picture that raised the not-to-be mistaken utterance from the indignant British people, that Orangeism, (which dared, headed by the royal *tyrant* who has left our shores, to attempt to injure the rights of Alexandrina Victoria,) should be crushed by the arm of the law.

But another picture is before the mind. The Queen represents one, who, as the *chief magistrate* of the land, as the *fountain of*

honour as well as the fountain of *justice*,—as the possessor of the right of saying, "*La reine le veut*,"—as the selector of the responsible executive, has the power to do an immensity of harm or an immensity of good: to be, in fact, a POLITICAL character, whom thousands may curse or millions may bless.

In this political character we, therefore, are to view the Queen; or, in other words, in the aspects which she must be regarded as bearing the title of QUEEN. It is in this sense that the phrase "*Queen's friends*" has been, is, and will be, put forward.

It is in this sense that the phrase must be closely examined, and its application carefully watched, because the very circumstance of the bias, which the regard for her, as a *woman*, produces, may tend to make us less acute in the inquiry, "WHO ARE THE QUEEN'S *real* FRIENDS?"

An ELECTION is at hand: that is, the People of Great Britain are about to be called upon *to declare their opinions*, and to send their opinions, through their *representatives*, into the Commons House of Parliament.

Parties claim to be chosen as the representatives of these opinions, and put forth as a standard, around which they hope to congregate a majority of electors,

THE QUEEN'S FRIENDS.

LORD JOHN RUSSELL has put this forth. He, as the Secretary of State for the Home Department, therefore would induce the belief, that the *present Ministry* are the "Queen's friends."

This is the understanding with which his lordship has put forth the phrase, as claimed by him: and, it is in this sense, that it is the interest of the party in power this phrase should be spread abroad.

The Ministry are the *professed friends of liberty*: the opponents, as Whigs, of the enemies of liberty, the Tories.

Liberty, civil liberty, is the *right, possessed by man, to rule himself*; and, as a right, gives him a claim to *that* amount of freedom, which, in society, is *compatible with the enjoyment of the same* amount by others.

The *representative* system is the *form*, under which this liberty manifests itself—it being impossible, in *fixing the relative amount* of freedom, that the whole nation could be assembled together, *individuals* are selected to represent *bodies of men*.

The Ministry, therefore, as the Queen's friends, are to be viewed in reference to their conduct in connexion with the *representative* principle; or, to use a more lengthened phrase, in reference to *the sovereignty of the people*; a watch word formerly dear to the Whigs.

By the character of the Ministry in *this* respect, the ELECTORS are called upon to judge the Ministry in the claim they pompously put forward as the Queen's friends.

The Whigs *brought forward*, the People *carried*, the Reform Bill: This great charter of liberty being the most splendid instance on record of the principle of representation, obtained from a powerful oligarchy by moral weapons.

When the Reform Act was in progress, the Whigs promised, or at least hinted, that they would bring forward other measures to give a *completeness* to the operation of this Bill: namely, *The shortening the duration of Parliaments*, *Vote by Ballot*, and *the removal* of the *Taxes on Newspapers*.

The people consented to the postponement of these from the anxiety, intense on their part, to realize the passing of the Reform Act. An election took place, and then "The King's friends," alias "The supporters of the Reform Bill Ministers," were returned, so as to give the Ministers a majority of nearly 180.

The Ministry, therefore, *had the power* to carry out to completion the *operative efficacy* of the Reform Bill, in the points already referred to. Did they? No. To Ireland, they gave a *Coercion Bill:* to England, persecution: the sellers of the unstamped were hunted like beasts: complaints at public meetings were not allowed to be uttered: a policeman slain at one of these meetings, a jury thought was justifiably homicidized: unionists were transported: Manchester, and other rich places, were deemed fat enough to feed two more bishops: and to the despots of Britain, the tory oligarchy, was entrusted the patronage of the army, amounting in value to six millions a-year.

Now, mark, Electors of Britain and Ireland, Earl Grey's Government had a majority, a powerful majority. They had the power to *perfect the operation* of the *representative* principle. Did they use that power for so noble a purpose: a purpose so consistent with their professions? They were frightened at the mighty power of the representative principle, and almost every measure they brought forward had stamped upon it the desire to limit, or, at least, impede the operation of this principle.

The consequence soon became apparent. The ministerial majority diminished. What is it now?

The people, having been deceived, were no longer to be won by the phrase "King's friends," "Supporters of Ministers."

The phrase, now used, is "*Queen's friends*." Shall we be again deceived? 'Tis our fault if we are.

To prevent deception, their claims may be considered more fully.

The great object, on which the Whig Ministry rest their pretensions, is the Reform Bill: and the great benefit, as has been already stated, of that bill is, that it recognizes the right of man to rule himself, which, by this bill, he does through his representatives; thus embodying the great principle, the sovereignty of the people.

If the Ministry can be deemed as SINCERE in their recognition of this principle, they may be regarded as "The Queen's friends;" and they, and their supporters, as such, are worthy of the support of the electors.

How then is their sincerity to be judged of? By their willingness, manifested not by wishes, but by *acts*, to give effect to the principle of the Reform Bill.

If willing to give effect to this principle, they may be regarded as *sincere;* if *unwilling*, as *insincere.*

To decide this point, to answer this question, it will be sufficient to bring the Acts of the last session under review: ever remembering the statement of Supreme Wisdom, "*By their deeds ye shall know them.*"

To give free operation to the representative principle, it is necessary, First, That every elector should have an equal chance with others in the choice of the representative for whom he votes:

Second, That the elector should suffer no inconvenience in his character, person, or property, from the exercise of his right:

Third, That the elected should be subject to the deprivation of the trust, when ceasing to represent the electors:

Fourth, That the elector should have freedom of choice in respect to the individuals he may wish to represent his opinions:

Fifth, That the elector should have an unfettered opportunity of knowing the proceedings of his representative, and of the general bearings of the representative and executive body.

To have an equal chance, he, in giving his vote, must not experience any interference, dependant upon the possession of that which men do not possess equally, namely, *wealth.* Any interference connected with, or dependant upon, this, gives the rich elector an undue advantage over the poor elector. In regard, then, to the carrying out this equality of chance, what have the Whig Ministry done?

They have raised barriers, by which the impossibility of the poor elector having equal chance with the rich elector is settled.

The first instance to be cited consists of the Rate and Tax Paying Clauses in the Reform Act; by which those, who do not pay the rates and the taxes, due at the preceding April quarter, on or before the 20th day of the following July, have not their names enrolled as registered electors, and, if previously enrolled, have them erased.

These clauses favour the wealthy: rob the poor man of his vote: thousands have been so robbed, and the *constituency has been thereby lamentably limited.*

These clauses operate injuriously in limiting the constituency in another way, namely, by enabling individuals, otherwise well qualified, to escape *having a vote*, a freedom realized by the non-payment, although perhaps able, of the rates and taxes, by the specified time.

It might be supposed that the Ministry, professing a love for liberty, would, having seen how this Rate and Tax paying clause had acted, have brought forward some measure for the purpose of removing this bar on the exercise of the right of electing a representative.

Have the Ministry acted thus? No: they have *opposed* each motion brought forward for the abolition of the Rate and Tax paying clause.

It is true that Lord John Russell brought in a bill (after being

virtually defeated by Mr. Duncombe on this matter,) by which the *time of payment* of the rates and taxes were extended to November. This extension of time is but a palliation of the evil; the infringement of the right is the same, because the right of voting is dependant primarily on the man's tenantcy being equal in value to £10. inclusive of taxes and rates, and government have a more speedy means than almost any other creditor of enforcing payment.

Another feature necessary to the elector's liberty is, that, in the choice of his representative he shall not experience *any inconvenience in his character, person, or property*, from voting as he wills.

In connexion herewith, it is evident that, as man exists in society, being dependant upon others for support, he must be liable to be canvassed by them, as long as either class can, by any influence, act upon the elector.

Of the intimidation thus practised, most are aware.

This intimidation is not confined to the rich: the operative classes also exercise it.

Did the Ministry wish that the principle of the Reform Bill should be carried out, they would have hailed any measure by which the elector could be enabled to give his vote, untrammelled by fear of consequences from one party or the other.

Such a mode is the BALLOT, *as proposed to be taken by Mr. Grote:* a plan, which would effectually protect the voter, and enable him to vote for whom he will.

Have the ministry supported this mode of carrying out the principle of the Reform Bill? The answer is known, *They have opposed the Ballot.* Why? Because it is un-English, they say. The real reason, it is to be feared, is, That they love the power that *open voting* gives *them*, as men of wealth and property.

That this is the reason of their opposition to the Ballot appears from the fact, that there is not a single Minister but who belongs to clubs, the members of which are elected by Ballot: which mode of election is adopted at these clubs, *to give every member freedom in the exercise of his right.*

If the Ministers are sincere in the reason they proffer against the Ballot, in *popular* elections, they pay the compliment to the electors, consisting principally of the middle classes, and of mechanics; that they are more noble, more honest, more courageous than the aristocratic class: that they are so English, that they will sacrifice themselves rather than belie their conscience, which these Lords and higher orders have not courage to do, and, therefore, have recourse to the Ballot. In connexion with this, however, the question may be asked, What right has any one to connect *martyrdom* with the exercise of a civil right? No real friend of liberty would. Thus, then, the conduct of Ministry in these two particulars, has been such as to occasion just doubt of their sincerity as advocates of liberty, because they have by this conduct persisted in retaining impediments in the way of the free exercise of the elective franchise, and have thus given the lie to

their loud professions in favour of liberty, which can be manifested in society only through the *representative* principle.

Third,—The representative principle, to be rendered most effectual, must be called into action, so that the individual chosen shall, as the representative, be *dependant* for his *continuance* in *that position*, upon the continuance on *his* part as the *real representative* of the opinions of his constituents; and, as it would perhaps not be well to have members liable to immediate dismissal by their constituents, it is necessary that the time, at which the representative is brought in contact with the represented for re-election, should be not at long intervals.

A representative is, by the present law, a law originally passed by the Whigs, elected for *seven* years, a period, by which the day of reckoning is removed far too distant.

The Ministry, then, as friends to the *representative* principle, and as wishing that the House of Commons should afford an exact representation of the people represented, it might be inferred, would give their support, if not to a *yearly* return of the representative to the constituency, at least to a three years return.

Triennial Parliaments, by which this would be realized, the Ministry have opposed, also any attempt to *shorten* the *duration* of Parliament.

Thus they have afforded a third ground for doubting their sincerity as Reformers.

Fourth,—To give the representative principle full operation, and thereby to perfect liberty; it is necessary that the elector should have *freedom of choice* in regard to the *individual whom he wishes to represent him.*

If he is limited to a certain number, and is obliged out of this number to select his representative, he is limited at once in the exercise of his right. For, although among that number, he may see one whom he may regard as likely to represent his opinions, yet, there may be others, not of that number whom he would prefer.

Thus limited, he would be injured in his liberty, and electors are so injured by the present law in regard to *Parliamentary Candidates.* This law requiring that no person can sit in the House of Commons as Member for a County, unless he has a property qualification of £500. a-year in landed property, or of £800. a-year in *funded* property: and as a member for a *borough*, he cannot sit unless he has a property qualification of £300. a-year in *landed* or £500. in *funded* property.

It might be inferred that, were the ministry sincere in their admiration of the representative principle, they would use every exertion to do away with this property qualification, as operating in establishing a limitation upon the right of choice, which the elector as an elector, is supposed, as a free man, to exercise without any limitation.

And more particularly such conduct on the part of the Ministers,

is to be expected, when they well know, that the qualifications of perhaps *one third* of the Members of the late and previous Houses of Commons are spurious; and that, of those who are qualified, the majority have their estates so mortgaged, that these qualified members are quite as open to politely presented bribes, as it is argued, those would be, who are not in possession of the bona fide qualification.

Have the Ministry supported the abolition of this limitation of the right of choice by the electors?

They have opposed and negatived a motion, having as its object, the abolition of this qualification, and giving perfect freedom of choice to the electors, during the past session of Parliament.

Here, then, is a *fourth* ground for doubting the sincerity of their attachment to the representative principle.

Fifth,—One most effectual means for carrying out the representative principle, is that by which the electors will be enabled to *obtain accurate information respecting the conduct of their representatives.*

To realize this, an *unstamped press*, or, to strip this phrase of its mystification, a press without *any governmental tax upon it:* a press, without any charge upon it, save the expences incurred in purchasing the materials used, the labour employed, and the talent bestowed, would be the most effectual agent.

Such a press, the Whigs, before gaining the ministerial benches, unceasingly cried for.

Since seated, they have *fixed* upon us "*a penny stamped press.*"

They thereby convey that *political* knowledge is so important as to require, that an additional penny should be paid before such knowledge can be tasted: and that all other knowledge, but that relating to the representative principle, shall be allowed to wander free without this penny.

And what is more to the point of ascertaining the sincerity of the Ministry, this permanence of a stamped press is in decided opposition to the positive declaration of Lord Althorp (when Chancellor of the Exchequer) to Mr. Place, Dr. Birkbeck, and others, who formed a deputation to him on the subject of the Tax on Newspapers. He positively declared that the *Tax should be taken off Newspapers*, and thus the friends of the representative principle were prevented in their continuance of the agitation of the subject. Attempts have been made to get rid of this penny stamp. The Ministry have opposed such attempts, and thereby have shown by a fifth evidence, that their regard for the representative principle is very questionable.

These proceedings on the part of the Ministry are to be regarded as negative acts, having a tendency to establish that the love of the representative principle, as professed by them, is not a sincere love.

In order, however, to decide whether and how far they are to be

regarded as "The Queen's friends," one or two of their positive acts during the last session may be referred to.

The Ministry boast of their love of liberty: they talk of the right of the people to tax themselves: and of the important right which the people have through their representatives over the *national purse:* a right, the great protection of the people; because, with the purse in the nation's hands, despotism must hide its head, or at least, conceal its deformities. "*Stopping the supplies*" is what even the Ministers have hinted at when refractory oligarchs needed to be frightened.

The power of the representatives over the national purse being so important to the protection of the rights of the people, to the preservation, in other words, of the representative principle itself, of the recognition of which the Ministry profess themselves to be particularly proud; it is presumed, that the Ministry would never consent to violate this right in any circumstance, or in reference to any part of the British people.

What have they done in Canada?

It appears that the government in Canada consists of the ASSEMBLY, which may be regarded as the House of Commons; of the LEGISLATIVE council, which may be regarded as the House of Lords; and of the EXECUTIVE council, which may be regarded as the King, or rather, the King in council.

It appears that the members of the legislative council are for life: and are responsible not to the people, but to the Colonial office in this country.

It appears, that against the legislative council charges have been substantiated: First, That they have taken all the waste lands of the colony, together with the saleable timber, and have disposed of the same for the personal advantages of their body, with the ulterior view of corrupting the representation: Second, That they have allowed the revenues to be squandered by persons not responsible to the people: That they and the executive council have prevented the assembly in their attempts to obtain accurate accounts of receipts and expenditure.

The assembly further complain, that *though four-fifths* of the people of Lower Canada are Catholics, yet a dominant episcopal church is set up, and *one seventh* of the land of the Colony has been appropriated to the support of this dominant sect.

The assembly further complain, that when delinquency is detected, there exists no power to punish.

That the judges cannot be impeached: they being responsible only to the executive council, of which they form a part.

Such are the complaints; and this specific statement has been given, because the electors of this country are not sufficiently aware of the bearings of the question. The Canadians have demanded "*That the legislative council shall be elected by the people: that all the revenues shall be placed under the control of the people: that the judges shall be made responsible to the people.*"

These demands have not been listened to. Year after year have passed by. Delusions have been practised upon the Canadians; and, at last, sick with delay and irritated by insult, the Canadian assembly have refused to sanction the application of the *public revenue to the payment of the salaries of the officials*, most of whom are looked upon by the Canadians as the rif-raf of society, and as public plunderers.

What have the ministry done? Every unprejudiced mind would say, from the professions, already noticed, respecting the right over the public purse, that they would respect the decision of the Canadians.

But, no, Lord John Russell has persuaded the Commons, (the Lords needed no persuasion), to pass resolutions, condemnatory of the Canadians, and denying them their demands: and, then, during the close of the session, when most members have left town, the Ministry complete this disgraceful inroad upon the principles of liberty, by obtaining a vote of £142,160 of the money of the *people of Great Britain*, for paying the salaries of these *Officials* in *Canada*: thus virtually destroying the constitution of lower Canada; a constitution, by which the assembly have the right *of voting supplies.*

If men *dare* to do thus in reference to Canada, they cannot have any love to the representative principle at *home.* They are foxes in disguise. These men are no more friends of the Queen or of the people, than were the Ministers of George his friends, or the people's friends, when they patted the obstinate monarch on to war with his people in America.

Here then is a positive act of the present Ministry: an act, demonstrative that the Ministry are afraid of the operation of the representative principle.

Another view of the conduct of the Ministry, in connexion with their professed regard for the representative principle, may now be taken. It has reference to the House of Lords.

The least reflection on the constitution of the House of Lords will convince, that its foundation is the *despotic* principle.

The principle upon which liberty is based is the *representative.*

The Lords and the Commons are, therefore, the antipodes of each other.

The Lords represent *themselves*, not simply as individuals, but also *a class*, having *exclusive*, and, therefore, *unjust* privileges.

The Commons represent the *people:* and, even in them is imperfection, and the imperfection consists (and is worthy of remark) *in the degree in which the operation of the representative principle is limited.*

The characters of both are distinct: so distinct, that it is *utterly impossible* the representative, the liberty principle, can be carried out and its benefits realized, till the Lords *are made to submit* to the operation of this principle in *the constitution* of their House.

It is worthy of repetition, yea, even of belief in as a law of

nature, that the two principles cannot unite. They cannot work together. God and mammon are not more opposite.

The Lords have been sinning against the representative principle, since the *first separation of them into a distinct House.* They then became legislatively despotic.

Their sins were not so apparent till of late; not because they sinned before less, but because they made the House of Commons do their sinful work: the Commons being *their* representatives.

The Reform Bill destroyed this anomaly: and its operation has made the *inherent vice* of the constitution of the House of Lords apparent. Their sins now shine forth. The *destructive* tendency of the principle of their constitution continually manifests itself.

These evils are seen and are felt by the people. They are seen and have been felt by the Ministry. Lord John Russell has seen and has felt them; and yet his Lordship, who must have sense enough to see that these evils are not *coincident*, but *consequent* circumstances of the peculiar principle upon which the Lords' House is founded, declares positively that he will not allow any one to touch this principle: no, though he must see and indeed virtually acknowledges, that any popular benefit, gained from the Lords, is an offering *which fear has begotten upon their pride*, and is a result in opposition to the principle of their constitution.

And, yet, Lord John and the Ministry profess to be friends of the representative principle, to be the admirers of the sovereignty of the people.

Electors of Britain! will you sanction such inconsistency?

It may be well, in order to show still more clearly the inherent opposition that the very constitution of the House of Lords presents to the operative developement of the representative principle, either in reference to themselves or to the nation at large, to notice a few of the acts of their Lordships during the last month.

The FINAL REGISTER OF ELECTORS BILL having passed the Commons, and read a first time in the Lords, was brought forward by Earl Radnor to be read a second time. It was thrown out by 67 votes against 34.

The nature of this bill was the following: It preserved the right of voting to electors, who should *change their residences* from one registration to another: it provided also that votes, *undisputed before the revising barristers*, should not be brought in question before an election committee of the House: the first provision merely securing the rights of existing electors; the latter preventing a considerable expence in disputed elections.

The despotic principle (the Lords) saw, that, by these means, particularly the latter, (the expence of defending a seat, principally from the witnesses to be called, terrifying many from becoming candidates), the representative principle would gain a greater freedom of operation; and they threw out the Bill.

So that an elector will still be liable to disfranchisement if he changes his residence, and candidates are to have the dread before them of expending thousands on election committees.

But Lord John Russell, "*The* QUEEN'S FRIEND," will not consent to any organic change in the Lords: will not agree to give efficacy to the representative principle.

A second measure which, after passing the Commons, the Lords had introduced to them, provided, in order that the electors in *Cork* and *Dublin* might have time to give their votes in the period allotted to polling, a *greater number of polling booths*.

This was an *aid* to the representative principle: and, though it was established, that the electors, in these places, are relatively so numerous, that they could not easily be polled in the fixed time at the present polling booths; and, though the Lord Chancellor informed their Lordships, "that the object of the Bill was to let those persons, who had the right to vote, exercise that right;" and, notwithstanding the statement of the Duke of Richmond, that "one of the greatest benefits, conferred by the Reform Bill, was the increase of the polling places," Lord Redesdale, who figured in the rejection of the preceding Bill, succeeded by 74 votes against 36, in obtaining the rejection of *this* Bill.

But Lord John Russell will not admit of any organic change: will not adopt the only means to ensure the success of the representative principle.

A *third* measure, brought forward by Lord John Russell, to supply the place of Mr. Duncombe's Bill, for the *abolition* of the Rate and Tax paying qualification, namely, a Bill, giving the electors till November to pay the taxes and the rates, due the previous April, has been rejected by the Lords: so little will they, or rather can they recognize any aid, either direct or indirect, to the operation of the representative principle.

These are the men, whom Lord John Russell will not allow to be approached in the only way, in which they can be effectually approached, through the introduction into their constitution of the representative principle; an organic change.

Can any thinking elector, reviewing these facts, come to any other conclusion than this, that Lord John Russell is opposed to or afraid of the operation of the representative principle: and therefore, cannot be regarded as a sincere friend of liberty?

Such then is a review, brief it is true, of the conduct of the Ministry, during the last session, in reference to the representative principle. This review is sufficiently long, however, to demonstrate that the *animus* of the Ministry, is, if not in direct opposition, at least, only *forcibly* friendly to the carrying out the *representative* principle; a conclusion, to which the corollary must be added, they are not sincere friends to liberty.

What then is to be recommended?

That the people become really the Queen's friends: and that the Queen is willing to receive such friends, who can doubt after Lord Durham's letter?

Believing, then, that the mind of youth is generous, and is

naturally prone to the love of liberty: believing that the young Queen's education has made her feel, that LIBERTY IS A RIGHT which belongs to all, *untainted by crime and unaffected by incapability;* believing that her throne is safe, just in proportion as founded upon the broad basis of the POPULAR will; and believing, that the Ministry, as a body, though professing from a kind of family and associational necessity, the principles of liberty, are afraid of the *consequences* likely to arise from this liberty, and, therefore, cannot be sincere reformers, or, in other words, sincere recognizers of the principle of *representation;*

We conclude, that the duty of the electors of Britain, is to treat the Ministry and their supporters, not as the Queen's friends; and, that, before electing them, should obtain security from them in *writing* that *they* will be the *people's*, and thereby the Queen's friends, by binding themselves to the advocacy of

TRIENNIAL PARLIAMENTS,
HOUSEHOLD SUFFRAGE,

independent of Rate and Tax paying qualification; and

VOTE BY BALLOT:

The rest will follow.

J. E.

Verdict of the Jury, held on the body of Robert Cully, the policeman, who was killed at a public meeting, in Coldbath Fields, May 13th 1833:—

"We find a verdict of justifiable homicide on these grounds: That no riot act was read, nor any proclamation ordering the people to disperse: That the government did not take proper precautions to prevent the meeting from assembling: and, That the conduct of the police was ferocious, brutal, and unprovoked by the people: And we moreover express our anxious hope that the government will, in future, take better precautions to prevent the recurrence of such disgraceful transactions in the metropolis.

Samuel Stockton, Foreman, Cromer-street, Baker.
John Spalding, Chichester place, Baker.
Charles Tighe, Chichester-place, Upholsterer.
Benjamin Hastie, Calthorpe-place, Baker.
Henry Neville, Chichester-place, Corn-chandler.
John Bliss, Chichester-place, Baker.
Joseph Burgess, Chichester-place, Pawnbroker.
Thomas Pearson, Gray's-inn-lane, Ironmonger.
John Graham, Gray's-inn-lane, Grocer.
Edward Holder, Gray's-inn-lane, Glass cutter.
Joseph Langran, Gray's-inn-lane, Cheesemonger.
William Purdy, Gray's-inn-lane, Shoemaker.
William Davies, Gray's-inn-lane, Plumber.
John Daller, Gray's-inn-lane, Broker.
George Dennis, Sidmouth-street, Baker.
William Alexander, Cromer-street, Auctioneer.
Robert French, Calthorpe-place, Baker.

SECOND SPECIES OF SPINAL DEFORMITY.

To the Editor of the Anthropological Magazine.

Dear Sir,—Pursuing the elusidation of Spinal Pathology, I come next to the second species. It is directly opposed to the first, being anterior, forward or inward. Here the back bone sinks inwards, forming an unsightly and disagreeable hollow. It is most common in, though not invariably confined to, the lower division of the back. I have seen many examples of this deformity, which, when recent, is speedily and easily cured. Whether the back bone projects outward or inward, the spinal cord is equally compressed, and paralytic symptoms show themselves in one or both limbs. The patient is unable to walk much, or to carry himself erect for a few seconds together.

Upon this species, as far as my own experience goes, and it is not little, some degree of paralysis or paraplegia, almost always attends. Whenever paralysis seizes upon *both extremities transversely, you may safely refer the mischief to the spine.* Here I am at variance with the faculty generally, who, true to long cherished errors, still refer it to the brain. It was, as far as I know, the universal opinion of the London practitioners, on my arrival in town 17 years since, that palsy of the lower limbs, from internal causes, always originates in the brain. Dr. Baillie published an Essay, in the Transactions of the College of Physicians, advocating that doctrine, and his high authority for a time bore down all opposition. The dissection, on which his opinion rests, was not performed under his own eye. It was so imperfectly executed, that it really proves nothing. This I told him in a long friendly conversation, only a few months before his lamented death; and I succeeded, I believe, in making an impression upon his candid mind, he feeling less confident in his premises. The same notion still prevails in high quarters, more especially among the seniors, who are, for many reasons, least open to conviction. We must remember, that as the ocean continues agitated, and the foaming billows lash the shore sometime after the storm has subsided, so elderly people adhere pertinaciously to long advocated errors.

In proof of this assertion, as regards medical men, I may observe, that when our immortal countryman, Dr. Harvey, published his facts, and irresistible deductions in favour of the sanguineous circulation, it is said that not a single medical man in Europe, who had arrived at middle age, became a convert; so strong are the prejudices and pre-possessions of education, and so difficult are they to be overcome in advanced age. For the same reason, the practice of our illustrious Sydenham made very little progress in his life-time, though now universally adopted. Moreover, such was the low estimation in which he was held through life on account of his medical opinions, that, notwithstanding his being a regular graduate of Oxford, he never attained the fellowship of our bigotted College of Physicians.

THIRD SPECIES.

One or a few vertebræ often emerge out of the column and rise conspicuously above the rest, or they may be equally depressed. I have at present two children, a boy and a girl, in this predicament. Sometimes the whole pillar rises in lumps, looking like embossed work from end to end. Again it forms a zig-zag line, being neither rectilinear, nor exhibiting any two vertebræ of the same elevation.

This modification of spinal irregularity produces little apparent deformity when merely looked at; but if the fingers be carefully passed along the column, it is found, that no two of them are in their relative places. I and my friend, Dr. Serny, had a young lady, aged 15, under our care, who was afflicted with this form of the complaint. She had been for fifteen months the patient of two eminent surgeons; they employed extension by weights with muscular exercises. From their long attendance, no good ensued. She is now almost well under a different method. So far as my experience enables me to judge, this variety, though little appears to the eye, is much more difficult and tedious to overcome, than in many where the deformity is more conspicuous. Although the deviation of a single or of few vertebræ may occur in any part of the column, they are most frequent in the lower cervical and upper dorsal divisions, because the neck is almost constantly in motion, and these bones are least protected. This irregularity is more frequent and conspicuous in the fair sex, than in males. From their mode of dress it is brought into view, especially on stooping forward. It would be of less consequence were it not that the nerves, distributed superficially over the back part of the head, proceed from them. I have traced *many distressing head aches** to this particular source, and have, moreover, succeeded in curing them, by merely returning the vertebræ to their natural stations.

Various distressing circumstances are often witnessed, arising from the intricate nervous communications of the neck. The nerves are very numerous, and intimately entwined, or matted together. (A boy of eight or nine years old was conveyed to London from Berkshire, afflicted with severe epileptic fits, of which he had endured more than one hundred every twenty-four hours for the last few days. An eminent surgeon and distinguished anatomical teacher, thinking that nothing could be done for his relief, and that he must die, recommended the parents to take him home again without a moment's delay. I was afterwards consulted, and found a hard phlegmon, or inflamed and suppurating tumour, on the side of his neck, resting on a cluster of nerves. To the irritation of this painful swelling, communicated to the nerves below, I imputed the fits. Under this conviction I directed fomentations and poultices to the affected part. So great was my success with the soothing treatment employed, that from the moment of its adoption he remained easy, and free from fits. Suppuration soon followed, the part healed, and the boy has continued well ever since. This is an instructive case, and shows the necessity of carefully

* See my Pathological and Practical Observations on Spinal Complaints, Case 8th.

investigating causes, before we come to any decision in the practice of medicine.)

The results proceeding from these intimate nervous connexions are very curious and interesting. In examining anatomical plates, the reader will, in them, perceive how extensively the face is supplied with nerves, because the passions are here displayed. They originate in two sources, the fifth and seventh pairs. The latter, the only one I shall particularly notice, is called the *nerve of expression*, from the important offices it is destined to perform. It is a very sensitive nerve, as there are abundant opportunities of knowing, from seeing its varied workings in the face, expressing the secret emotions of the mind. In consequence of the intimate connexion of this nerve with those of the spine, it sympathises largely with the deranged spinal column. To this all-powerful cause, we may trace the premature signs of age, the shrunk features, the furrowed cheeks, the disagreeable stains of the skin, and repulsive complexion, even in early life, of many amiable ladies. Though I cannot, in this limited address, enter into the origin of these remarkable changes, they are easily explained on physical data.

Your's, dear Sir,

E. HARRISON.

Holles Street.

N. B. Dr. Harrison's Letter to a Young Lady, describing the precautions to be observed after the cure of her spinal complaint, is, from the press of matter, unavoidably deferred to the next number, which will be published on the first of September.

BENEFICIAL APPLICATION OF PHRENOLOGY IN THE TREATMENT OF CEREBRAL DISEASE.

Communicated to the Anthropological Society, by JOHN EPPS, M.D.

THE following case, showing the application of Phrenology to the discovery and the cure of cerebral diseases, will, no doubt, from this circumstance, interest the Society, and, therefore, I beg to offer the same to their attention.

Upwards of six years since I was consulted by a gentleman of Brighton. This individual had suffered for many years from a peculiar affection in his *head*. When walking, he was obliged suddenly to stop, otherwise he felt he should fall. He felt a kind of emptiness in the back of his head, as if there was a part that presented an empty space, in which something occasionally rushed. This peculiar affection became so severe, and the concomitant anxiety became so distressing, that he was obliged to give up his pursuits in life, and retire with a smaller fortune than the prosperity of his concerns might have enabled him to accumulate. It may naturally be concluded, that he, suffering thus, would consult medical practitioners of eminence. He did consult the

most eminent physicians and surgeons; one treating him for liver affection: another for stomach affection: a third for determination of blood to the head, and so on: till, at last, he had became so dissatisfied, not having gained any permanent benefit, that he determined to consult no more, but to pay attention to his general health and diet, and leave the rest to Providence.

Some zealous patient of mine, a dissenting minister, however so won upon him by his sweet eloquence, an eloquence, engendered by the conviction in his mind that I had relieved him of a severe disease, which had, under other treatment, been untractable, that he was persuaded to consult me; he, however, not having much faith in the opinion, this zealous patient developed, that I should be sure to do him good.

He consulted me: described his feelings as before stated: pointed at the *position of the pain*, which occupied *adhesiveness*, descending downwards on each side to amativeness, and thence to the spinal cord. He further added, that he felt a sensation of chilliness, at the back part of his head and at the upper part of his neck.

I was struck with the position of the pain fixed for years, and the peculiar uneasy feeling: and, reflecting thereon, asked him, whether he remembered having experienced, a short time previous to the attack of this disease, any severe domestic calamity? (It may be well here to premise, that I knew nothing of this individual's previous history, except so far as the previous symptoms have declared the same.) He looked astonished: his countenance changed. I found that I had touched that which was connected with a chord that vibrated no agreeable impulse to the mind. He asked me why I asked this question, which, he added, he was never asked before. I answered that I so enquired, because I imagined that the locality of the affection he complained of indicated the operation of some such circumstance as that I had referred to in my inquiry. He acknowledged what, he said, he had never thought of before in connection with this matter, namely, that *his wife on his return home from worship, one Sunday, was suspended from the bed post;* and, that, now, he could recollect well that the pain came on about a fortnight afterwards. He could, however, hardly believe it possible, that I could have asked this question without some previous information respecting the circumstance. After I had satisfied him that this was not the case, his conviction was strong that I should do him good. I prescribed for him: treated the cerebral affection on phrenological and physiological principles: and had the pleasure of effecting a decidedly beneficial result. He became better: but when almost well, he went to be electrified. The electrizer applied the electricity so strong as to produce much injury. This threw the case back: however we begun again: he persevered in the mode of treatment prescribed: and a few months since, he favoured me with a call, when I had the pleasure of finding him, not only in the enjoyment of good health, but also in the spirit of testifying to me and to others, that to me he was indebted for enjoying the last three or four years of his life, in a way, and to an extent, which he had given up all hopes of realizing.

ADDRESS DELIVERED TO THE KENTISH TOWN MECHANICS' LITERARY AND SCIENTIFIC INSTITUTION.

By the President, JOHN ISAAC HAWKINS, *March* 13th, 1837.

MY DEAR FRIENDS—I have, since you did me the honour of electing me your president, strongly desired to attend the meetings of the institution, and make myself useful in the furtherance of your objects, by contributing to the common stock, a portion of that experience, which the formation and the management of various scientific institutions for near half a century, have enabled me to acquire; but circumstances have hitherto prevented me.

I warmly congratulate you on your forming yourselves into a Mechanics' Institution, on the principles of *mutual instruction:* you have, by so doing, assumed an honourable position in the march of improvement; honourable, because early, the march having but just begun at the right end.

The march formerly was backwards, because directed by animal propensity; but now, being directed by intelligence, it has commenced its movement right forwards; and you have placed yourselves in the foremost rank.

The evidence of this forward march, this beginning of the march at the right end, is found in the circumstance, that Mechanics' Institutions and Mutual Instruction Societies are springing up in and around the metropolis, and in some of the provincial towns, in great numbers.

These are engines of immense power, for elevating the human mind out of the deplorable state of ignorance and sensuality, in which the mass of the community, rich as well as poor, has for ages been immersed; and for preparing it, by means of intellectual culture, for the reception of moral and religious influences, by which the dominion of the animal propensities may be overthrown, and the reign of justice, mercy, and truth, be established in its stead.

Mechanics' Institutions, and Mutual Instruction Societies, are among the most promising means of elevating the mental conditions of the working classes, because such societies yield experience of various modes of cultivating the understanding; and, by it, of raising the bodily condition of the labourer, out of that cruel state of incessant labour, into which ages of ignorance and misrule have reduced him.

It is in vain to look for any other means of improvement than knowledge.

Ignorance rejects improvement, because it cannot form any conception of the value of it.

Ignorance must, in the first place, be superseded by knowledge, and afterwards improvement can commence, and may have a chance of growing and becoming fruitful of good works.

Mechanics' Institutions, and Mutual Instruction Societies, are

also pregnant with incalculable benefits to the self-styled middle and upper clases, by the noble examples of the useful employment of time, which will be set by those who have heretofore been continually insulted by the abominable epithet of the lower classes. The misfortune is, that those so contemptuously rated as the lower classes, the multitude, have heretofore looked up to the few, arrogating the designation of the middle and upper classes, for direction and example.

And what sort of direction have they given? To obey the powers that be, without enquiring by what right and by what means they are the powers that be, or by what right and by what means they retain possession of powers originally obtained by brute force in violation of all right.

And what sort of examples have they set? The most servile cringing to those pretending to be above them; and intolerable tyranny to all who were considered to be below them: thus playing alternately the slave and the tyrant. And rarely indeed, has the upright course of justice and equity been adopted, or even acknowledged by them.

The upper and middle classes have set the demoralizing example of straining every nerve to raise themselves out of the station they respectively occupy, and to gain a rank above, without caring, or even for a moment considering, what degradation or what suffering they may occasion to others who stand in the way of their ambition. The infernal strife, arising out of this universal and incessant toiling for self-aggrandizement, is the cause of nine-tenths of the mental and bodily misery, now suffered by all ranks and conditions of people in this proud country, where this strife prevails to an extent immensely beyond that of any other country on earth.

The cruelties practised by Pharoah on the Israelites, in compelling them to make bricks without straw, were tender mercies, compared with the barbarities heaped on the devoted heads of British paupers, as a consequence of the straining alluded to, by the possessors of overgrown wealth, and by the holders of a little brief authority, whose fantastic tricks the poet feigns "will make even angels weep."

The upper and middle classes have set the example, of destroying their bodily health by the unbridled indulgence of sensual gratification; and how dreadfully they have been copied, may be gathered from the large fortunes commonly made by the proprietors of gin palaces and public houses; yet the gin drinking poor are denounced as criminals by the wine bibbing rich, who are in reality, the greater criminals.

They have set the example of destroying their mental health, by the omission of all rational scientific cultivation, and by spending a large portion of their time in debasing, stultifying, and brutalizing amusement. Need we wonder then that the poor vulgar should imitate the rich vulgar in these and similar practices, as far as they are able?

An instance or two of the alternate exercise of the tyrant and the slave, by the same person, may serve to recall to the recollection

of every one present many similar examples, which they must have noticed if they have been observers of what is passing around them.

I was once, on buying a twopenny article at a jeweller's in Oxford Street, a little amused at the slavish manner in which the shopkeeper returned thanks when I gave him the twopence, by which he probably gained three-farthings. Immediately after I had paid my purchase money, and while I was putting on my gloves, a genteel looking workman came up to the counter from a corner of the shop, and handed an elegant piece of workmanship which he had made to order, and which would probably yield a profit of ten or fifteen shillings. The slave, instantly assuming the scowl of the tyrant, asked the workman how he could have the assurance to interrupt him while he was attending to a customer, and sternly commanded him to leave the counter; the man instantly obeyed, humbly taking his old station in the corner, saying, as he retired, "I beg pardon, Sir, I thought you had done with the gentleman, and that I might come to the counter, as I have another appointment." "Hold your tongue!" was the ungracious, unmerciful, and unmanly reply. The poor fellow was mute, but evidently distressed in mind under the consideration that he must lose the benefit of the other appointment, by reason of the tyranny thus exercised upon him. I left the shop with disgust at this compound of tyranny and slavery.

The tyranny of London servants in keeping those who come with single knocks, sometimes five minutes at the door, while they admit in five seconds, the fellow who has the impudence to come with a thundering rattat, is familiar to all of us: this would not be the case if the masters did their duty in repressing it.

Can it be wondered at, when the upper and middle classes set such demoralizing examples, that the lower classes should follow them to the total neglect of mental cultivation.

The poor indeed, may plead with some degree of plausibility, that they are so hedged in with the difficulties, which their tyrants have brutishly and cunningly planted around them, that they have neither time nor opportunity for mental exercises.

I confidently expect, however, that you and other societies will shortly prove, that almost every one, however low his condition, may find, if he make a prudent use of his means, both time and opportunity for mental improvement.

The working classes have too long looked for relief from legislation, and have wasted their time in debating on, and petitioning for, reform of our social institutions, and for redress of grievances, while the greatest of all grievances is, that the people themselves are ignorant and selfish, sensual, servile, and tyrannical.

Now, the cure for this gigantic grievance cannot come from without, but must commence within the mind of each individual. The best legislation can do very little towards it. It must be the work of the people themselves, they must "up and be doing." They must place a curb on their disposition to tyrannize on the one hand, and to cringe on the other; they must restrain their ambition

by respect to the rights of others; they must bridle their appetites for sensual indulgence; and then they will find that they can devote some time to the cultivation of their minds. In short, they must acquire a taste for mental occupation, and it will soon yield them both pleasure and profit; it will soon enable them to augment their productive powers, and to surround themselves with comforts which their former wretched condition forbade them to nope for.

The poor should not look to the rich for examples to follow, because the natural tendency of excessive wealth is to debase the mind, by encouraging the unrestrained exercise of self-will and sensuality.

The education of the rich, too, is of a most demoralizing character.

It is no mean problem in philosophy, to discover the means of training, to usefulness and moral excellence, a boy who is born to great wealth. But what can be expected of one, who is flattered from his cradle with the knowledge that he is born for the possession of great riches, by means of which he may be allowed the power of doing as he pleases?

The education of the rich is not only miserably deficient in many important points, but is pregnant with a multitude of abominations.

In those hot-beds of tyranny and slavery, the Schools of Eton, Harrow, Westminster, and others of that class, where the sons of the wealthy are prepared for the Universities, it is notorious, that the elder boys are allowed to take the younger ones into their service, under the designation of fags, and the abject and unmitigated slavery of those fags is carried to a pitch loudly demanding universal execration.

The following anecdote will show some of the demoralizing effects of this vile system.

One of these fags being sent by his superior to a shop-keeper at Windsor on an errand, came in, in a broiling heat, having made great haste, and was very urgent to be served immediately, saying that if he was not back in such a time he should be half killed. "Now I hope," said a gentlemen present, who knew the iniquitous system, "I hope that when you come to be a senior scholar, and to have a fag under you, you will be a little more merciful." The boy, instantly assuming the attitude of a horse jockey, and jerking his arm as if using a whip, exclaimed with all the delight of anticipation, "Oh! the rascal! I'll lay it into him when it comes to my turn."

So the multitude, who submit to be made fags of by those above them, indulge their own propensities by making fags of all over whom they can acquire power; and this vile spirit descends down to the lowest dregs of society, and these, in their turn, vent their spleen on dogs, donkeys, and such other animals as they can subject to the yoke of their tyranny.

The gourmanderie of the rich, too, is a constant stimulus to the middle and lower orders (pardon me for so often repeating the disgusting distinction; I speak of things as they are, and not as they

ought to be). The gourmanderie of the rich is a constant demoralizing example to all others. Good living, as they have the stupidity to call the congregation of heterogeneous compounds, rendered poisonous by cookery, daily crammed into their depraved stomachs, and then deluged with wine and strong drinks, whereby they are rendered still more poisonous, to the utter destruction of their health and comfort. This good living, or rather perversion of good living, is copied, and the copy copied again and again, in less and less splendour, until it reach the oyster-stall in the street, and the gin-shop near to it, where the luscious morsel is swilled down with the liquid fire, with as reckless an inattention to the direful consequences, as the rich evince in their equally culpable indulgence of their inordinate appetites.

Thus, good living, from the highest to the lowest, is the phantom pursued, while disease and misery are the realities seized. The poor fool argues that he has as much right to a good tuck out of oysters and gin, as the rich noodle has to stuff himself with putrid game and claret. And who shall deny the *right?* The proper question is, WHAT IS THE BENEFIT?

Can any reasonable being expect that this enormous evil, this devastating pest of society, will ever be reformed by those rich, who perform no useful part in the great business of life, because their unwise parents inflicted upon them the misfortune of what is falsely called independence?

There are a few, and but very few indeed, among the rich, whose riches have not rendered them mere useless beings; from those few a good helping hand may be expected to co-operate with the many in the middle classes, in advancing the condition of man; but it is to the real operatives that we must look for the main power of human advancement.

There is no hope of the rich reforming themselves, and setting a good example to the poor; but the multiplication of Mechanics' Institutions and Mutual Instruction Societies, give us a well grounded hope that the operatives will, by degrees, reform themselves, and set a noble example of orderly conduct, which will shame the rich into a humble imitation of their good manners.

This, indeed, will be a radical reform; and, until this reform take place, it is but a waste of time to be crying out for political reform; *the moral reform must precede the political.* Let the people reform themselves in sufficient numbers, and public opinion will command political reform. Radical political reform will be immediately obtained when called for by a reformed people.

The real radical reform wanted is, what the term implies, a reform of the root. The root of all political power is the people, and if that root be diseased there can be no healthy growth. The cry of "reform the representation," will be answered whenever the representatives are chosen by a reformed people, for a reformed people will choose wise representatives.

"Reform the church!" is another senseless cry as yet. Mutual Instruction Societies will quietly and amicably reform the church, without wasting time and temper in squabbling with the superior

clergy, as they are miscalled, whose superiority too frequently consists only in capacity of stomach and greediness of gain.

Let but the people reform themselves, and a strong public feeling will manifest itself in favour of every kind of healthy, political, and ecclesiastical reform; and whenever reform becomes supported by public feeling, there is no difficulty in having it carried into effect. Public talking and public threatening are of no force, unless well backed by public feeling.

Public feeling is made up of private feeling, therefore every good private feeling contributes towards the formation of a good healthy public feeling. But the spouter for public reform and liberty, who is in private life a tyrant, labours only for the backward march of improvement. I have known many instances of this demoralizing character. One in particular shall be mentioned.

I was once at a house at Brighton, where there was a billiard room much resorted to. The law of the room was, that no party should remain longer than an hour at the table, if another party were waiting for it. A London alderman (a notorious brawler for reform) and his party were playing at the table, when a viscount and his friends applied for it, expecting to have the use of it at the expiration of the hour. The time arrived, and the viscount's party came to take their turn, but were refused; they left the room, and stated their grievance to the proprietor of the house. He went to the alderman, and respectfully reminded him that he knew the law of the table, and expressed a hope that he would give it up to his lordship. The alderman said he would keep the table as long as he pleased; he did not care a fig for the law, he had possession, and would retain it. On which the landlord left the room, and the alderman immediately locked the door, and remained playing for hours; after which he gloried that he had broken the law, and kept the viscount from playing.

I concluded that such a man ought not to be trusted with power of any sort, convinced that he who will break the law of a billiard table, or any other trivial law to which he has signified his consent by acting under it, would break the law of the land, or any other law, to suit his own convenience.

This lawless alderman, afterwards lord mayor, now dead, has a monument erected to his memory as a champion of liberty ! ! !

The multitude have been crying out to their oppressors for reform; but how can ignorance, tyranny, and sensuality, understand anything about reform.

Ignorance can only be reformed by knowledge; tyranny can only be reformed by justice and mercy; and sensuality can only be reformed by temperance.

And here I have touched a vital point in all reform. Temperance, in its broadest signification, is a necessary ingredient in every kind of reform.

Temperance in eating will not allow the palate to be indulged at the expence of healthful nourishment.

Temperance in drinking is exceeded whenever the nerves are stimulated to such a degree of activity as to be succeeded by languor.

Temperance in dress and in household appearance is violated whenever the expences of these things exceed the limits of the income, however small that income may be, because temperance requires provision for old age.

Temperance in study is infringed upon whenever it prevent the fulfilment of duties, which circumstances command; or, whenever it interfere with due healthy exercise of the body.

Temperance in labour is not complied with whenever it prevent a moderate share of study.

A multitude of other points of temperance will readily occur to any one carefully pondering the subject.

In respect of study, a word of advice to the members of Mechanics' Institutions and Mutual Instruction Societies, may be useful.

The attendances on those societies will become intemperate when they interfere with domestic duties; but those attendances may become of immense importance in furthering the march of improvement, if the members of those societies will make a practice of repeating, in their domestic circles, all that they see and learn at the meetings, and of performing, in the best manner they can at home, the experiments which they witness at the meetings and lectures. They will thus confirm in themselves the knowledge they have gained, and impart a considerable portion of it to an enlarged circle. And they may rest assured that each member of their family, female as well as male, old as well as young, will be greatly benefitted in the long run, even if it do not appear at first, by the frequent communication of scraps of knowledge thus scattered among them.

I will only further take up your time by expressing the hope that your progress in knowledge may lead to the most beneficial effects in your practice, so that your near neighbours may be aroused by your good example, to join you in your laudable undertaking; and that your more distant neighbours, seeing the value of your proceedings, may be induced to call together their near neighbours, and form a new Mutual Instruction Society, which shall extend the benign influence and stimulate others, still wider from them, to go and do likewise, until every person shall be able to find a Mutual Instruction Society, within five minutes walk of his home, where he may go, spend his hour after his daily work is done, and lay in a stock of knowledge, then return to his family, and communicate the same.

In conclusion, let us fondly hope that Mutual Instruction Societies may, in a short period, so abound as to become an immense moral drain, to empty the gin palaces and public-houses of the worshippers of Geneva and Barleycorn, and to cause the people to imbibe the delightful spirit of science, and to taste the exhilirating fruit of good works, whereby they may experience that degree of mental and bodily elevation, necessary to the reception of exalted moral and religious influences, free from narrow-minded sectarianism, which is generative of disunion, bigotry, and all uncharitableness; and which is diametrically opposite to that genuine christianity, the essence of which consists of union, peace, and goodwill.

"As for you, you will continue to walk in the antient paths which your fathers have trodden, whilst others are tossed about without rudder or compass, by every wind of doctrine: you will hold fast the anchor of faith which is moored to the *rock of* PETER. Your mountains retain the 'tracks of those who evangelized peace,' and often have you worshipped in the spot which their footsteps have trodden. Well may you smile at the efforts of those who are shifting their religious tents on the moving sands in quest of some resting place, while you are conscious that your faith is immovable as the 'eternal hills' that surround you. As for me, I shall feel pleasure in visiting you as often as the other portions of the diocese. To have raised it to the *dignity of a deanery* was a COMPLIMENT due to *so valuable a portion of the flock*: and I am happy to have found in the learning and virtues of your worthy parish priest, the combined qualities which fit him for directing the conferences of the clergy, and discharging the delegated duties that are intrusted to *vicars of rural districts*. Wishing you from my soul every happiness, and the continuance of those virtues of charity, joy, peace, patience, benignity, chastity, and the other fruits of the Holy Ghost, which many of you have received through the *imposition of the bishop's hands*, I remain, your faithful servant in Christ, X JOHN TUAM."—*Extracted from the True Sun, June* 23, 1836.

We honour all men. We detest the cry that is raised by bigotted and cunning politicians against the Romish church; but, at the same time, we must add, that if any one wished to select a passage, clothed in all the beautiful and apparently unaffected simplicity of truth, which, however, at the time, was pregnant of errors and the most fulsome exaltation of the *priesthood*, this passage will serve for such purpose. The idea is monstrous, that through the imposition of the bishop's hands, charity, joy, peace, patience, &c. should be communicated. What are the poor unfortunates to do, who have had no such imposition? Are they without joy, peace, patience, benignity? It truly is only in the "*rural districts*" that such stuff can be spread abroad.

The above quotation is part of an address by John Tuam, who puts X before his name: who calls himself an archbishop. Who professes that he follows Christ, whose kingdom is not of this world; and yet who takes the liberty of making a large district of the surface of Ireland, namely, Tuam, the source of his name: his name thus manufactured, being John Tuam. These men profess that they will not have their religion incorporated with state. This appropriation of the country, by designating themselves in this way, would represent a little to the contrary: would induce the belief that a closer relationship with the earth would not be unpleasant to those spiritual men. It would tend much to remove many objections dependent upon *civil* questions, to the Romish system, if the Romish priests gave up this mapping out of the country; and did not fall into the same absurdity as the episcopal church manifests, namely, making the *land* religious and not the *people*.

ESSAY ON THE WORDS "FLESH" AND "SPIRIT," PHRENOLOGICALLY CONSIDERED.

Read before the Anthropological Society, July 6, 1837, by JOHN EPPS, M.D.

AMONG the various impediments to the progress of the human mind in its course of legitimate, and therefore, well-ordered, exercisings, none, perhaps, stand more pre-eminent than the VAGUENESS OF MEANING ATTACHED TO WORDS. Men, generally, are content to use expressions, of the ideas, originally connected with which, they have very indefinite notions. And, indeed, this vagueness of meaning, as attached to words, is a natural result of the difference in organization; and, being so, the liability on the part of many to use terms, of the meaning of which they have but inaccurate impressions, is more easily perceived; and, although such use is much to be lamented, the person, so employing words, will not be condemned by the enlightened believer in the intimate connexion between *mental manifestation* and *cerebral organization*. As illustrations of this view may be of service, both in understanding the terms about to be explained, namely, the "flesh," and the "spirit;" and in enabling us to ascertain the sources of the vagueness of meaning into which each of us sometimes falls in the use of words, the following may be brought forward.

A man with large *individuality* and large *perceptive* powers, beholds a new object: this he names: and this name, it is evident, will be, ever afterwards, *representative* of the various impressions which were made upon the various intellectual organs to which it, in its totality and its particularities, appealed. And not only will this term be representative of these impressions, but also of the *strength* of these impressions: which strength of impression we, as phrenologists, know, will be proportioned in a great extent to the size of the organs: which, in the supposed case, being large, the impressions will be very strong.

Another individual, with *moderate* perceptive powers, beholds, for the first time, the object already observed and named by the previous individual. He learns its name: and although, perhaps, he may have observed every particular which the first observer noticed, it is evident, that as his impressions will be less in power than those received by the former individual, because his organization is less developed, the name, representative of the object, which originated these impressions, will necessarily have a meaning less definite, and, consequently, more vague, than that experienced by the former individual.

A third individual, with some of the intellectual powers decidedly *deficient*, observes the same object as the two previous individuals, (we will say he is deficient, like Mr. Mylne, in the organ of COLOUR): and is it not evident that the impressions produced upon his mind

by the object, will be very different from those produced in the other two individuals? he will have an impression of every property of the body except its *colour:* and having learned the name of the body observed, will have a vagueness of meaning connected with the use of the term, from the very peculiar circumstance that one of the properties of that body, namely, its *colour*, has never been an impression produced upon his mind: and, consequently, he can never have the memory of such a property, when he uses the term; and so far the term will be deficient as a representative of the body of which it is a name, because it does not record, when presented to his mind, either by the vocal utterance of others, or by his own remembrance, the fact that the body represented has a colour.

A fourth individual might be conceived, who has a *deficient* organ of FORM, and to him, after becoming acquainted with the body noticed, and its name, there would be, necessarily, a vagueness in the use of the word by him, because it would not represent to him the accurate form of the body; although it might represent the other properties.

And so with the other perceptive powers, viewed as small. How very extended, then, will the vagueness become under such almost endless modifications of organization.

We might take other illustrations. Thus, we might suppose separate individuals, each having one perceptive power particularly large, and the other perceptive powers only moderate; and, in each case, it is evident, that each individual would receive impressions from the same object, different from those received by the others. But the object has ONE name: in the use of this one name then, it is evident, that the impressions awakened in each by its use being different, a vagueness of meaning in its use must necessarily arise.

Following out the idea, developed in these illustrations, we can readily perceive how easy it is to explain the great vagueness in the use of words; and also we learn the only method by which this vagueness can be removed, namely, by EQUALIZING THE ORGANIZATION. And further, when we add to the above illustrations, connected with the *intellectual* powers, the complications of the impressions connected with the difference of development of the organs of the *moral* feelings and of the organs of the *animal* feelings, we can readily understand that, as the impressions, produced by objects, must vary in each individual according to the difference of the organization receptive of such impressions, that the word used as representative of such objects, being representative of such impressions, must necessarily have a different power in each, and consequently must in its use, have a corresponding amount of vagueness. To take one illustration: A valuable watch is beheld by two persons, this watch not belonging to either of the two. This is seen to pass into the watch pocket of a third, to whom it does not belong. One of the two has a large organ of conscientiousness and a moderate sized organ of acquisitiveness: the other has a large organ of acquisitiveness and a small organ of conscientiousness. The latter individual is pleased,

and laughs at the success of the attempt.* The first individual calls out "thief:" declares the injustice of the act: stigmatises the individual as having committed a "robbery." Now the word "robbery" represents in the latter individual, the impression made on his organ of conscientiousness, by the perception of another individual taking possession of a certain thing that did not belong to him. Now this impression, not being produced on the mind of the second individual, the word "robbery" will not indicate to him the same thing: it will be representative to him, as it is to most professional thieves, of a "bit of fun:" a thing to be laughed at: the Calmuck did laugh. Hence another source of vagueness.

To show still further how the difference in the development of these organs may augment the vagueness of the same term, as used by the differently developed, let us suppose that a third individual with *small* conscientiousness but *large* acquisitiveness and *large* cautiousness, views the theft; the impression produced on his mind will be that of indignation at the theft, acquiring an intensity from the additional feeling of fear that he may be treated thus on some not distant occasion. He calls the act robbery: but how different is the impression, or the series of impressions, made upon his mind, in connexion with this term, from the impressions made upon the first individual.

In fact, an infinity of modifications may be produced by the modifications of organization, and therefore there is a never-ceasing power producing constantly that vagueness, relative vagueness, in the use of words, which appears at first sight so much to be lamented, as constituting a principal impediment to the progress of the human mind.

However, as the knowledge of the disease is half the cure, the science of Phrenology will be of the greatest service, because it will open up the causes of the variances in the opinions of men; and also of the differences of meaning that individuals attach to the same term.

That this vagueness in the meaning attached to words is an impediment to the progress of the human mind, it is imagined, all will allow; and the extent of the impediments, thus thrown in the way of human progress, is evidenced by another truth, proceeding fairly as a corollary from the truth already demonstrated, namely, that the *confusion will be in proportion to the extensiveness of the connexion* of the term itself. To unravel some of the Babylons that have been produced, for there are intellectual, moral, as well as physical Babylons, the following Essay has been drawn up, having reference principally to the real meaning of the words "flesh" and "spirit."

The reader of the scriptures must have become convinced of the

* Drs. Gall and Spurzheim relate the case of a young Calmuck, who was so fond of stealing, that when he was forbidden, by his confessor, to steal, he pined away, and his health was recovered only by being permitted to steal, but to return the object. The first thing he stole was the confessor's watch, when at mass: he returned it laughingly.

fact, that no terms have a more extensive import than those used in these writings. And, when this is considered, and also the additional fact, that the scriptures are intended to make us wise unto *moral* salvation, we must see how very important it is, that we should hail any means by which accuracy and definitiveness can be realized in connection with such terms.

Among such words of extensive and important meaning, the words "flesh" and "spirit," stand pre-eminent. The former is used upwards of 300 times in the scriptures: the latter nearly to the same extent.

In the New Testament, in which the word "flesh" is used most frequently, it is represented by the Greek word σαρξ, *sarks*, flesh.

What then is to be understood by this word? The theologian tells us, that this term indicates the *mere natural man.* But this explains nothing: for the natural man is a phrase quite as vague as the other. Indeed it, to be understood, implies a knowledge which, as yet, has not been realized by any person, namely, a knowledge of what really are the constituents of the natural man. The natural man is, say others, *every thing that is bad:* but this is merely a *definition*, and not an *explanation* of the term.

The term σαρξ *sarks*, must have one definite meaning: one fundamental sense, which, however varied may be the meanings given to the word in different places, must pervade all the other meanings, and must constitute the vein of gold that runs through the rocky strata by which it is surrounded. Let us, therefore, endeavour to seek out this fundamental meaning, and we have no doubt but that it will be a vein of gold to us.

The commonest impression awakened, when the term flesh is used, is something unpleasant; and, unpleasant, because it relates to *badness.* That badness is not essentially connected with the flesh is evidenced from the fact, that Jesus Christ, in other words, the *concentration of goodness, purity, and intelligence,* came "in the flesh:" and we are further informed, that "the flesh" was that on which God would pour his Spirit, Acts ii. 17. We are informed further, that "God was manifested in the flesh:" that Christ abolished in his flesh the enmity, &c. Ephesians xii. 10. And what can be more striking than the passage, "My flesh is meat indeed," John vi. 55.; which, flesh could not be were it in itself bad.

The flesh seems to refer to the *material fabric of the body.* Christ, speaking of the days when destruction should come upon the inhabitants of Jerusalem, says, that "no flesh should be saved." Matt. xxiv. 22.

That it refers to the material body evidence is afforded by the fact, that, when Christ appeared to his disciples, and when they were afraid, imagining that he was a spirit, he referred to the fact of the presence of his material body, showing that a spirit has not flesh, σαρξ, Luke xxiv. 29. as he had.

This, it is therefore concluded, is the primary meaning: *the mere material fabric of the body.*

The fundamental meaning seems to be the material fabric of the body; this fundamental meaning is extended afterwards to *that*

part of the mental nature, which is most intimately connected with this material fabric: that is, with man in the relationships in which he is placed, as connected with a "material body," and as performing functions, which that material body has in this world to perform.

These relationships have reference to the part of man's organic cerebral constitution, commonly known under the name of the *organs of the animal feelings*.

Thus amativeness relates to the condition of man in *this* world, by which he multiplies his race by the union of the sexes: in the *next* world, they neither marry nor are given in marriage.

Philoprogenitiveness refers to the love of the children thus generated: now, in the next world, children, *as such*, will not exist: and, therefore, this organ will not be needed.

Adhesiveness is another organ which produces attachment, individual attachment. In the next world there will be attachment, the attachment of benevolence: and, therefore, this is peculiarly an organ of time.

Inhabitiveness implies local attachment. In a spiritual world we cannot conceive of any notion of place: and, therefore, there is no activity for this organ.

Combativeness will certainly not be needed in the next state of existence: for there the wicked cease from troubling and the weary are at rest.

Destructiveness will not be needed there: because vice will not exist there: everything in the heavenly state is in accordance with the will of God; and, therefore, there is nothing to destroy.

Acquisitiveness will have ceased to be necessary, because there every want is provided for.

Constructiveness, as manifested in rearing buildings as habitations, will have ceased to be necessary, for there are mansions provided already for all God's followers.

Secretiveness will become unnecessary, because, though in this world we are to "be wise as serpents but harmless as doves;" in the next, no secresy will be necessary, for all will be open in the presence of the Infinite.

Cautiousness will not be necessary, "because perfect love casteth out fear."

Love of approbation and self-esteem will be directed into their proper channels; self-esteem in rejoicing in the honour and glory attained; and love of approbation in seeking continually the praise of the Almighty.

But the organs of the moral feelings, those that peculiarly constitute man a superior being, we shall want in the next world: heaven is the activity of them, and, therefore, in heaven we shall require them. Universal love is the food and the produce of benevolence: universal justice is the food and the produce of conscientiousness: universal adoration is the food and the produce of veneration: and universal communion, and the love and the imitation of universal excellence, are the food and the produce of marvellousness, hope, ideality, and imitation.

Taking, therefore, the flesh as primarily meaning the material

fabric of man: and then extending its meaning to that part of man's cerebral organization, which pertains more particularly to his character as an *animal* being, an attempt will now be made, under the definite information which Phrenology affords as to the constituents of man's animal powers, to diminish the vagueness and to remove some of the absurdities connected with the notions attached to the word "flesh."

The flesh has been considered to be bad, because the activities of the animal feelings are so constantly without the regulations derived from the dictates of the moral feelings, and therefore the abuses are continually seen. In fact, the animal feelings without the moral feelings are the dogs, the wolves, the goats, the tigers, the lions, the butterflies, the eagles, the vultures of society. They were never intended in man to act alone: but, in many, they have gained such preponderance, that it may be truly said in reference to them, in regard both to organization and to action, "They have gone *backward*." Consequently, whenever the flesh acts alone it will lead to abuse; and, in man more than the lower beasts, because their instinct seems to be more nicely balanced by the Creator: they have not restraining powers. It was, it is repeated, never intended that they should act alone in man. We can, therefore, agree with Paul, who in his letter to the Galatians, v. 19. 20. "Now the works of the flesh are manifest, which are, adultery, fornication, uncleanness, lasciviousness, (activities of amativeness unguided): "idolatry" (the loving any object too strongly, which the animal feelings are apt to do): "witchcraft:" that is, pretending to effect cures by skill not dependent upon the will of the Supreme, an abuse of secretiveness, acquisitiveness, self-esteem, and love of approbation: "hatred," the activity of self-esteem, wounded in itself or through some other animal feeling: "variance," the activity of combativeness, destructiveness, and self-esteem: "emulation," ζηλοι *zeloi*, the activity of love of approbation: "wrath," θυμοι *thumoi*, the activity of destructiveness and self-esteem: "strife," εριθειαι *eritheiai*, the manifestation of destructiveness, combativeness, and self-esteem: "seditions," διχοϛασιαι, the activity of self-esteem and destructiveness: "heresies," αιρεσεις, the activity of self-esteem, in forming new opinions without taking the trouble to enquire sufficiently: "envyings," φθονοι *phthonoi*, the activity of self-esteem, love of approbation, and of acquisitiveness: "murderers," φονοι *phonoi*, or blood lovers, the activity of destructiveness: "drunkenness," μεθαι *methai*, lovers of wine: "revellings," κυμοι *kumoi*, the activities of gustativeness: and any other activities that may have been not noticed, the apostle comprises under the title και τα ομοια τουτοις, *kai ta omoia toutois*, and the like to these.

Such then are the works of the flesh as described by Paul, and such works are the activities, as has been demonstrated, of the ANIMAL FEELINGS, as established to exist by phrenological observations.

From the striking accordance between the statements of Paul and the productions of the unregulated activities of the animal

feelings, the position is made clear, that the unregulated activities of the animal feelings constitute that part of man's nature, to which the word flesh, used in the bad sense, can be applied: in fact, that these evils described are the works of *the flesh;* that is, they are the works of organs, part of man's mental constitution, which ought never to work in man unless in combination with the organs of the moral feelings, with which he is endowed.

The flesh is therefore bad when, in man, it works by itself. It is not bad in animals when it works as it does in the lower animals, by itself: and why not? because these lower animals have not the counteracting, the guiding organs. We do not think of calling a cock that visits many hens, or a dog many bitches, an adulterer: we do not call a dog a sinner, a violator of the social compact, when he runs away with a bone, or even with a portion of meat; we do not call a hawk a murderer, when it pounces upon a poor weak sparrow: neither do we consider a boa constrictor wickedly gluttonous, when lying with a half swallowed animal in his mouth, being unable to digest more. And why do we not attach an injurious opinion to these manifestations? Because we feel that these animals have not been endowed with organs to direct their animal instincts. Man has; and to similar actions, on his part, blame and sin are attached: and why? Because he has organs of the moral feelings. It may be said that this was all known before? It may be said that every one knows that each person *has a conscience;* and, that, having this conscience, is the cause why he is condemned for his acts. And then, What use of Phrenology in such investigations? The answer is simple. Some dispute that conscience exists, except as produced by the teaching of society. Phrenology gives a *physical* demonstration of the existence of organs, active in the production of this conscience, and, therefore, establishes thereby, that man has a moral constitution as well as an animal. How important, then, must Phrenology appear. It is as important in the point of demonstrating, by physical evidence, the existence of a moral nature, as is the production of a leg, as an agent in walking, in physically demonstrating that a means by which we walk is the leg.

The first, the fundamental meaning of the word "flesh," is the *material fabric of the body;* the second, that part of the *mental nature most intimately connected with the material fabric;* and thus intimately connected, because producing in its activities those feelings essential to man's existence, and continuance as an inhabitant of this lower world. Such are the *animal feelings.*

If we view the word "flesh" in its use in connexion with the fact of the difference in development of the different organs of the animal feelings, we shall be enabled readily to understand the different meanings that different persons attach to the word. An individual with amativeness as the large organ, will find the flesh in him to be the constant desire after objects of the opposite sex. The individual, with a large organ of love of offspring, will find the love of children become a source of temptation to him, leading him to neglect the duty which he owes to society. One with very large

destructiveness, will consider the flesh to be the liability to pass into passionate states of mind. The man with large acquisitiveness, will regard the flesh as the great tendency to acquire lucre. He with large gustativeness will consider the flesh to be the excess in eating and drinking, to which he is prone. And thus every man will have his besetting sin, or in other words, an animal feeling, which, preponderating very much, is apt to direct the whole energies of the mind into the devising means for the gratification of this organ.

It is thus quite evident that when the word flesh is used, each individual will attach a different meaning to it: a meaning, which will correspond to the peculiar predominating feature in the individual's animal organization.

Having thus endeavoured to unfold the meaning of the word "flesh," and having, at the same time, endeavoured to deduce some practical conclusions respecting the difference of meaning attached to this word from the difference in organization in connexion with the organs of the animal feelings, the next point to which the attention is to be directed is the meaning to be attached to the word "spirit." —*(To be continued.)*

FRENCH MODE OF ELECTION.

"The Chamber of Deputies is composed of 459 deputies, elected by 459 electoral colleges, each electing one deputy. Those colleges are convoked by the King, and in that town in the electoral arrondissement which he shall appoint, no discussion is allowed. The college elects its president and examiners, and the election commences. A list of the electors being fixed up in the place of election, the president calls on the electors by name, and each receives from him a piece of paper open; on this piece of paper he writes the name of the condidate he prefers, folds it up, and gives it back to the president, who puts it in a box placed by him for that purpose. The box remains open for six hours, and is closed at three o'clock in the evening, when its contents are immediately examined. First. The number of papers is compared with the number of persons who have voted. Second. An examiner opens each piece of paper, and gives it to the president, who calls out the name inscribed on it. The result is then made public and the papers burnt. A deputy to be elected immediately, must unite one third of the total number of votes inscribed in the college, and one half of the votes taken in his favour. If the scrutiny, having once taken place, does not produce this result, the bureau declares the two candidates who have got the most votes, and no other can then compete with them; the one who on the next trial has the bare majority is elected. A college is open for ten days; and every matter of dispute that occurs is taken down and submitted afterwards for decision to the Chamber of Deputies." —*H. L. Bulwer's Monarchy of the Middle Classes.*

J. TRAPP AND CO., PRINTERS, 31, BUDGE ROW, WALBROOK.